Antitrust Economics Workshop
September 29, 2021
8:30 a.m.–2:00 p.m.

48th Annual
Conference on International Antitrust Law & Policy
September 30–October 1, 2021
Day 1: 8:00 a.m.–4:50 p.m.
Day 2: 8:15 a.m.–4:30 p.m.

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Supplemental Readings
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Panel 2: The Economics of Platform Acquisitions
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48th Annual Conference on International Antitrust Law and Policy

Day 1

Panel 1: Will Regulation Take the Antitrust Out of Antitrust
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Lunch Panel: 20 Years of the ICN—We Were There at its Creation

Panel 2: "I'm Not Dead Yet:" Continued Policy and Analytical Challenges For Assessing Vertical Restraints—Foreclosure, Access and Even "Essential Facilities"
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48th Annual Conference on International Antitrust Law and Policy

Day 2

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Panel 2: In-House Counsel Roundtable: Managing Compliance in a World of Dynamic Enforcement and Regulation
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Panel 3: Class Actions: An Emerging Global Divergence?
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Pinar Bagci  
Principal  
The Brattle Group

Dr. Bagci has 25 years’ experience advising clients on the economics of competition, regulation, and damages assessment. She has provided economic analysis for clients throughout in-depth competition and regulatory investigations, antitrust litigation, and international arbitrations.

Dr. Bagci has advised Europe’s leading companies and financial institutions throughout cartel, merger, dominance, State Aid, and market investigations by the European Commission (EC) and national regulators in the UK, Europe, Australasia and the US. She has represented clients in a variety of industries including mining, electricity, gas, oil, aluminium, oil based chemicals, flat glass, caustic soda, credit default swaps, interchange fees, retail banking, Libor, Euribor, Forex, consumer electronics, digital platforms and government bonds. Several of these cases involved alleged benchmark manipulation. She has particular experience with abuse of dominance, exclusionary conduct, and alleged foreclosure strategies, including testimony at trial.

Dr. Bagci has submitted written and oral testimony in international arbitration and litigation proceedings in the UK High Court, the London Court for International Arbitration (LCIA) and the Permanent Court of Arbitration (PCA) in the Hague. She is currently retained as a testifying expert in connection with several private damages actions and class action claims arising from alleged cartel infringements brought in the UK High Court, the UK Competition Appeals Tribunal and the US District Court Western District of New York.

EDUCATION
University of Cambridge, Ph.D and M.Phil in Economics  
Victoria University, New Zealand, MBA and BA

SELECTED TESTIMONY AND CONSULTING
– Providing liability and damages expert testimony on behalf of a global client in relation to follow-on class action claims for cartel damages brought before the UK Competition Appeals Tribunal  
– Testifying expert on liability and damages for a global client in antitrust follow-on litigation concerning forex benchmark manipulation in the UK High Court  
– Advising on liability and damages estimation in the interchange fee litigations brought against Visa and Mastercard in the UK Competition Appeals Tribunal  
– Testifying on damages for an international chemicals manufacturer in defence of a cartel damages claim brought by buyers in the US caustic soda market  
– Provided expert testimony on liability in the London Court of International Arbitration on vertical restraints, anticompetitive foreclosure and retail price maintenance in a digital platform market
– Advising on liability and the estimation of consumer damages in a digital platform market for a potential follow-on class action claim in the UK Competition Appeals Tribunal
– Prepared expert testimony on abuse of dominance, anticompetitive foreclosure and excessive pricing in a commercial arbitration in the Swedish Chamber of Commerce
– Submitted expert testimony in the High Court of England and Wales concerning a claim for damages arising from the alleged manipulation of the LIBOR benchmark
– Advised a European energy company throughout a Competition and Markets Authority (CMA) investigation of competition in GB energy markets.
– Advised a global investment bank throughout an EC investigation of anticompetitive information exchange and exclusionary conduct in the global market for trading credit default swaps (CDS)
– Advised a UK retail bank throughout a Competition and Markets Authority investigation of competition in the UK retail banking market
– Provided economic analysis and expert testimony throughout in-depth merger proceedings conducted by the European Commission in European oil refinery markets.
– Advised in connection with EC State Aid Proceedings regarding alleged preferential electricity tariffs between the state owned hydroelectric generator and a European aluminium producer
– Advised a European card payments provider in connection with an EC investigation into the reasonableness of the multilateral interchange fee for credit and debit card payments in Europe.

SELECTED PUBLICATIONS
– “The Use and Interpretation of Economic Evidence in the ABB-BritNed Case”, 23rd Annual Competition Conference, International Bar Association, Florence, September 2019
– “Just passing through? Cartel damages under the new EU directive” Co-authored with Dr Andrew E. Abere, Corporate Disputes, April-June 2015.

Michael Carrier
Distinguished Professor of Law
Rutgers Law School

Michael A. Carrier is Distinguished Professor at Rutgers Law School, where he specializes in antitrust and IP law. He is co-author of the leading IP/antitrust treatise, *IP and Antitrust Law: An Analysis of Antitrust Principles Applied to Intellectual Property Law* and the author of *Innovation for the 21st Century: Harnessing the Power of Intellectual Property and Antitrust Law*. He has written more than 130 book chapters and articles in leading law reviews, has been
quoted more than 2000 times in the media, and has been cited in courts including the U.S. Supreme Court. Professor Carrier has testified before the FDA, FTC, National Academies, Senate Judiciary Committee, House Judiciary Committee, and House Energy & Commerce Committee; is a past chair of the Executive Committee of the Antitrust and Economic Regulation section of the Association of American Law Schools (AALS); was a policy volunteer for the 2020 Biden-Harris campaign; and served on the 2016 ABA Antitrust Section’s Presidential Transition Task Force.

**John Carroll**  
**Partner**  
**Sheppard Mullin**

John Carroll is a partner in Sheppard Mullin’s Antitrust & Competition Practice Group in the Washington, D.C. John’s practice focuses on civil and criminal antitrust matters, including mergers & acquisitions, strategic counseling and compliance, and global cartel investigations. Prior to private practice, John was in the Mergers I Division of the Federal Trade Commission’s Bureau of Competition for several years. While with the FTC, he investigated, challenged, and negotiated settlements in a number of potentially anti-competitive business combinations and received an Award for Meritorious Service for work on merger litigation.

**Adina Claici**  
**Principal**  
**The Brattle Group**

Dr. Claici is a competition economics expert whose background combines consulting experience, academia, and nearly a decade at the European Commission’s Directorate-General for Competition (DG Competition).

Dr. Claici specializes in mergers, antitrust, and state aid cases. She also provides clients with insights on competition policy developments in the EU. She has supported the European Commission in European General Court hearings related to mergers and state aid.

Dr. Claici is a frequent speaker at conferences and seminars, and has been named one of the top competition economists by Who’s Who Legal. She has been published in numerous academic journals and has authored several book chapters in the areas of state aid and the digital revolution. In addition to her consulting work, Dr. Claici is currently a Visiting Professor at the College of Europe as well as at the Barcelona Graduate School of Economics.

Before joining Brattle, Dr. Claici was the Managing Director of a European economics consultancy’s Brussels office. Prior to that, she gained valuable experience at DG Competition, where she was a senior member of the Chief Economist Team and served as the coordinator for the European Competition Network of Chief Economists.

**Andrea Coscelli**  
**Chief Executive**  
**U.K. Competition and Markets Authority**

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Andrea Coscelli has been the Chief Executive of the Competition & Markets Authority (CMA) since July 2016. He joined the CMA in November 2013 as the executive board member heading the Directorate responsible for UK merger control, the markets regime and the CMA’s work in regulated sectors. He joined the CMA from Ofcom (UK Communications Regulator) where he was a Director of Economic Analysis. He previously worked at Charles Rivers Associates (CRA) in London where he was a Vice President (Partner) in the Competition Practice. He co-founded the Association of Competition Economics (ACE) in 2003. He holds a PhD in Economics from Stanford University and was awarded a Commander of the British Empire (CBE) for services to Competitive Markets in the 2020 New Year Honours.

Daniel Culley
Partner
Cleary Gottlieb

Daniel P. Culley is a partner based in the Washington, D.C. office of Cleary Gottlieb Steen & Hamilton LLP. His practice focuses on antitrust counseling and antitrust litigation.

Mr. Culley’s work includes counseling, merger control, antitrust litigation, and civil and criminal government investigations, particularly for high-tech industries and two-sided markets. Daniel has represented clients in federal and state courts and advised clients in both criminal and civil investigations by the U.S. Department of Justice, the FTC, state agencies, and the European Commission.

In recent years he advised, among others, T-Mobile US and Deutsche Telekom in T-Mobile US’s merger with Sprint Corporation for a total combined enterprise value of $146 billion, and in the successful federal court trial brought by a coalition of state attorneys general challenging the merger; LVMH Moët Hennessy–Louis Vuitton, the world’s largest luxury goods company, in its $16.2 billion acquisition of global luxury jeweler Tiffany & Co.; Broadcom in the merger proceedings before the EU Commission and the U.S. FTC leading to the unconditional authorization of its acquisition of Symantec's Enterprise Security Business, as well as in its $18.9 billion acquisition of New York-based software company CA Technologies; and Veolia Environnement S.A. (Veolia) before the Antitrust Division of the U.S. Department of Justice in Veolia’s hostile acquisition of Suez S.A. (Suez) through a public takeover bid.

Mr. Culley recently co-authored the articles The Failing Firm Defence in the Age of COVID-19 (published in Concurrences No. 4-2020) and Revising the U.S. Vertical Merger Guidelines: Policy Issues and an Interim Guide for Practitioners (published in the Journal of Antitrust Enforcement), including its living appendix, Vertical Merger Enforcement Actions: 1994–April 2020. This article has been cited numerous times, including by the U.S. Department of Justice’s Antitrust Division and in remarks by the current Acting Director of the FTC’s Bureau of Competition; in testimony before the Senate Judiciary Committee; in reports by various policy institutes and economic firms; in articles published in a variety of academic, legal and business publications; and in The New York Times and The New Yorker.

Mr. Culley received a B.S. and a J.D. from Georgetown University in 2005 and 2008, respectively. He joined the firm in 2008 and became partner in the Washington, D.C. office in 2017. From 2018 to 2020, he split his time between the Washington and Brussels offices.
Mr. Culley is a member of the Bars of the District of Columbia, U.S. Court of Appeals, Ninth and Federal Circuits and Virginia. He is a native English speaker and is proficient in French.

John Davies  
Senior Advisor  
Brunswick Group

John is a Senior Advisor in our Regulatory and Public Affairs practice. He is a former lawyer and was a partner of Freshfields Bruckhaus Deringer, where he founded and managed the Brussels office and led the Global Competition Practice. Prior to Freshfields, John worked as a case officer in the European Commission's Directorate-General for Competition.

John assists clients on the policy and communications aspects of competition and foreign investment challenges, drawing on his broad understanding of the drivers of competition and regulatory intervention in Europe and elsewhere, and his experience advising high-profile clients across different industries and jurisdictions. He works with colleagues in both London and Brussels on some of our clients’ most complex and contentious matters. John also works with our teams globally providing senior counsel to clients on regulatory challenges in the context of cross-border transactions and investigations.

John’s recent Brunswick experience includes advising NVIDIA on the global regulatory issues in its proposed acquisition of ARM, Suez on the defense of the initially hostile offer from Veolia and Hyundai on the EU aspects of its proposed global ship building merger with Daewoo.

John’s experience as a lawyer included Comcast on its bid for Sky TV in Europe and for the global assets of 21st Century Fox, and AB InBev’s acquisition of SABMiller both of which matters involved significant regulatory issues. He also represented a major investment bank during its successful defence of two European Commission investigations into alleged infringements in the credit default swaps market.

John was voted Antitrust Lawyer of the Year 2016 and received an Antitrust Lifetime Achievement Award in 2019 both from Global Competition Review. He is a member of the task force of the American Bar Association on public interest in merger control. For 20 years, he was the consulting editor of the leading publication on merger control, Getting the Deal Through: Merger Control.

Peter Davis  
Principal  
The Brattle Group

Dr. Davis is an expert on competition damages actions, mergers and acquisitions, cartels, and market investigations. He is a former Deputy Chairman of the UK Competition Commission (CC), now a part of the UK Competition and Markets Authority (CMA). Dr. Davis has provided written or oral testimony in matters before the UK Competition Appeal Tribunal, the High Court of England and Wales, the Directorate-General for Competition, the CMA, the CC, the Office of Fair Trading, the Financial Conduct Authority,
and the Competition Commission of South Africa. While serving as a Deputy Chairman of the CC, he was a member of its Council, a member of its Strategic Management Board, and the Inquiry Chairman for a variety of competition investigations including phase 2 mergers, regulatory investigations in telecoms and water, and the payment protection insurance (PPI) market inquiry. Who’s Who Legal has listed him as a leading Competition Economist and Thought Leader, recently noting that he “is ‘top notch – a first-choice economist,’ providing skilled econometrics on cartel damages, investigations, and mergers.”

A widely published author, Dr. Davis has coauthored two books: Quantitative Techniques for Competition and Antitrust Analysis (Princeton University Press) and Damages Claims for the Infringement of EU Competition Law (Oxford University Press). He has also published research in numerous journals, including The Journal of Industrial Economics, the Journal of Econometrics, and the The RAND Journal of Economics.

Prior to joining Brattle, Dr. Davis was the head of an international economics consultancy’s London office and European competition practice. He has also served on the faculty at the London School of Economics and the MIT Sloan School of Management, and is a former President of the Association of Competition Economics.

Isabelle de Silva
President
Autorité de la Concurrence

Isabelle de Silva is the President of the French Competition Authority. Between 1999 and 2000, she worked at the French Ministry of Culture and Communication. From 2005 to 2008, she was Deputy Reporter at the Conseil constitutionnel (the French constitutional court). As government commissioner, she worked at the court of conflicts (2006-2009) and at the French Council of State (2000-2009). From 2009 to 2011, she was legal director of the French Ministry of ecology, sustainable development, transport and housing. After serving as member of the French regulatory Authority for press distribution (2012), and then as president of the Sixth subsection of the Administrative Jurisdiction Division of the Council of State (2013), she became member of the French Competition Authority in 2014.

Fei Deng
Vice President
CRA International

Dr. Fei Deng is a Vice President at CRA, and an expert on antitrust and intellectual property analysis in China. As one of the first outside economic experts engaged by China’s antitrust agency, Dr. Deng has extensive experience working with the agency on both sides of the table in merger reviews and antitrust investigation matters. Dr. Deng also has testified in various Chinese courts, including the Beijing, Shanghai, Guangzhou, and Shenzhen IP courts and the Guangdong High Court, on antitrust and IP issues, including FRAND rate-setting and injunctions for standard essential patents.

Dr. Deng’s work spans many industries, including digital platforms, telecommunications, and various consumer and industrial goods and services. She is currently an editor of the American Bar Association publication Antitrust, and has published extensively both in English and in
Chinese. Global Competition Review recognized Dr. Deng as “highly regarded, with sought-after expertise on advising Chinese companies on US antitrust law, and vice versa.”

Education
PhD, Economics, Boston University
BA, Finance, Shandong University, China

**Frederic Depoortere**  
**Partner**  
**Skadden Arps**

During his career, Mr. Depoortere has been involved in some of the most high-profile and complex merger control cases, including for clients such as Red Hat, Inc., Rockwell Collins, General Electric Company, Dupont, Merck and Nokia Corporation. He also deals with general EU competition law and compliance issues relating to cartels, vertical restraints and dominance. In 2021, Mr. Depoortere was named Competition Lawyer of the Year by *Benchmark Litigation’s* Europe Awards and also was named a Litigation Star for Belgium - Competition/ Antitrust by the same publication. He repeatedly has been selected for inclusion in *Cham- bers Global* and is highly regarded in *Chambers Europe*, in which clients describe him as “everything you would want in a lawyer: a very smart, hard-working, good advocate who is respected and liked in Brussels.” He also has been called a “deals guru” in the *GCR100*. In addition, Mr. Depoortere repeatedly has been named a leading practitioner in his field by *The Legal 500 EMEA*, *International Comparative Legal Guide: Merger Control*, *The International Who’s Who of Competition Lawyers & Economists* and *Who’s Who Legal: Competition*.

**Renée Duplantis**  
**Principal**  
**The Brattle Group**

Dr. Renée Duplantis has more than 15 years of experience involving complex competition matters in Canada, the United States and Europe.

She specializes in the empirical analysis of antitrust issues with a primary focus on quantifying the competitive effects of mergers. She has also been involved in several large competition matters involving allegations of abuse of dominance, exclusionary conduct, monopolization, collusion and price-fixing.

From 2011 through 2014, Dr. Duplantis was seconded to the Canadian Competition Bureau, and in 2014, she served as the T.D. MacDonald Chair in Industrial Economics at the Bureau. During this time, she provided the Commissioner of Competition with advice on economic matters related to competition policy, and participated in the economic analysis of high-profile investigations under the Competition Act, including two litigated cases, Commissioner of Competition v. Tervita (CCS Corporation) and Commissioner of Competition v. Toronto Real Estate Board.
Andrew Finch is co-chair of the Antitrust Practice Group and a partner in the Litigation Department. He rejoined the firm in 2019 from the U.S. Department of Justice’s Antitrust Division, where he served as Principal Deputy Assistant Attorney General (April 2017-August 2019) and as Acting Assistant Attorney General (April-September 2017). In those roles, he oversaw all aspects of the Antitrust Division’s operations, including merger reviews, civil and criminal antitrust investigations, litigation and appeals.

EXPERIENCE

Andrew is a seasoned and pragmatic antitrust counsel and litigator. His practice focuses on antitrust investigations and litigation, both criminal and civil, including merger reviews.

At the Antitrust Division, Andrew oversaw dozens of major merger reviews; supervised multiple litigations; negotiated civil and criminal settlements, including consent decrees involving divestitures, plea agreements and deferred prosecution agreements; and represented the Antitrust Division in meetings with other federal agencies, members of Congress, state attorneys general and foreign competition authorities. Throughout his tenure, Andrew played a leadership role in developing and implementing Antitrust Division policies and priorities. Among other things, he oversaw the establishment of the Division’s new policy regarding the consideration of effective antitrust compliance programs in criminal enforcement decisions.

Andrew also has spoken extensively in the United States and abroad about antitrust issues, including “big data” and technology platforms, acquisitions of nascent competitors, and the application of antitrust law to intellectual property disputes and standard-development organizations.

In private practice, Andrew has represented a broad range of clients, including in the financial services and payment networks, insurance, logistics and delivery services, technology platforms, healthcare, manufacturing, steel production, public performing rights, petroleum refining, publishing, retailing, shipping and air transportation industries, among others.

Eleanor Fox
Professor of Law, Walter J. Derenberg Professor of Trade Regulation
New York University School of Law

Eleanor M. Fox is the Walter J. Derenberg Professor of Trade Regulation at New York University School of Law. She is an expert in antitrust and competition policy, and teaches, writes, and advises on competition policy in nations around the world and in international organizations. She has a special interest in developing countries, poverty, and inequality, and explores how opening markets and attacking privilege, corruption, and cronyism can alleviate
marginalization and open paths to economic opportunity and inclusive development. Fox received her law degree from NYU School of Law in 1961; she received an inaugural Lifetime Achievement Award in 2011 by the Global Competition Review for “substantial, lasting, and transformational impact on competition policy and practice.” She received the inaugural award for outstanding contributions to the international competition law community in 2015 by ASCOLA, the Academic Society for Competition Law. Her book with Mor Bakhoum, Making Markets Work for Africa, is in publication by Oxford. She is co-author with Daniel Crane of Global Issues in Antitrust and Competition Law (2d ed. West 2017), and with Damien Gerard of EU Competition Law casebook (Elgar 2017), and of a casebook on US Antitrust Law (3d ed. West 2012).

Daniel Francis
Climenko Fellow and Lecturer on Law
Harvard Law School

Daniel Francis is a Climenko Fellow and Lecturer on Law at Harvard Law School, where he writes about regulation and competition, with a focus on digital and high-technology markets. Daniel previously served in the antitrust arm of the Federal Trade Commission as Deputy Director and as Associate Director for Digital Markets. At the FTC, he directed and managed a wide range of antitrust enforcement and policy activities, including in particular those in high-technology and platform markets, and oversaw a number of the Bureau’s divisions and offices. Daniel has also served as a Furman Fellow and Global Emile Noël Fellow at NYU Law School; as associate editor of the International Journal of Constitutional Law; and a Visiting Researcher at Harvard Law School. He spent ten years in the private practice of antitrust law with two multinational law firms, where his work focused on the defense, aerospace, and oil and gas sectors. Daniel also previously taught a course on European Union constitutional law and political history at Harvard College. Daniel holds degrees in law from Trinity College, Cambridge, Harvard Law School, and NYU School of Law, and he is admitted to the practice of law in New York and the District of Columbia.

Calvin Goldman
Principal
Law Office of Calvin Goldman

Calvin Goldman’s law practice is based in Toronto and focuses on all areas of Canadian competition, antitrust and foreign investment law, encompassing Canadian and international matters. In addition to being a former head of the Canadian Competition Bureau, Cal has acted as counsel in a significant number of leading competition law and foreign investment review cases. He also has acted as counsel for the Attorney General of Canada before the Supreme Court of Canada in two precedential competition cases. Cal continues to be widely recognized as a leading lawyer in many rankings, including: Chambers Global (2021); Best Lawyers in Canada (2021); Who’s Who Legal Canada (2021); among other similar 2021 rankings. From 2019 to August 2021, he was Co-Chair of the ABA Antitrust Law Section Task Force on the Future of Competition Law Standards which has delivered two substantial Reports to the
Section’s Council in August 2020 and August 2021 on evolving antitrust thinking and enforcement issues. Cal is Co-Chair of the International Chamber of Commerce Competition Commission’s Working Group on Competition Policy and Economic Recovery, and he is a Special Advisor to the Business at OECD Competition Committee (BIAC). Cal’s more detailed bio is available at: www.calvingoldmanlaw.com.

Olivier Guersent
Director-General
European Commission
Olivier Guersent graduated with distinction from the “Institut d’Etudes Politiques de Bordeaux” in 1983. He joined the French Ministry of Economy and Finance in 1984, where he carried out many investigations for the French Competition Authority. He joined the European Commission in 1992, initially with the "Merger Task Force" in the Directorate-General for Competition. Since then, he has alternated between the private offices of a number of European Commissioners (Karel Van Miert, Michel Barnier and Neelie Kroes) and DG Competition (successively Deputy Head of Unit in charge of cartels, Head of Unit in charge of policy and coordination of cases, Head of Unit in charge of merger control, Acting Director “Transport, postal and other services” and, from 2009, Director responsible for the fight against cartels. From 2010 to 2014 he was the head of the private office of Michel Barnier, Commissioner for Internal Market and Services. Having held the position of Deputy Director-General since July 2014, Olivier Guersent has been Director-General of the Directorate-General for Financial Stability, Financial Services and Capital Markets Union from 1 September 2015 to 31 December 2019. As of 1st January 2020 he is the Director General of the Directorate General for Competition. Married and a father of three children, Olivier Guersent is a member of the board of the non-profit organisation Aremis that provides medical care in the home, primarily to cancer patients in the Brussels area. He is a regular lecturer to postgraduate university students.

Barry E. Hawk
Founder; Adjunct Professor of Law
Competition Law Institute; Fordham Law School
Barry E. Hawk was formerly a partner at Skadden Arps where he led the international practice group in Brussels. He also was Professor of Law at Fordham Law School and Director of the Fordham Competition Law Institute (1974 to 2014). He is the author of numerous books and articles on antitrust and mergers, including Antitrust and Competition Laws (2020) --- http://www.jurispub.com/Antitrust-and-Competition-Laws.html

Scott Hemphill
Moses H. Grossman Professor of Law
New York University
Scott Hemphill is the Moses H. Grossman Professor of Law and co-director of the Engelberg Center on Innovation Law and Policy. He teaches and writes about antitrust and intellectual property. His research focuses on the law and economics of competition and innovation. His scholarship ranges broadly, from drug patents to digital platforms to the use of trademark law to thwart competition, has been cited by the US Supreme Court and the California Supreme Court,
among others, and has formed the basis for congressional testimony on matters of regulatory policy. Hemphill's writing has appeared in law reviews, peer-reviewed journals, and the popular press, including the Yale Law Journal, Science, and the Wall Street Journal. He joined NYU from Columbia Law School, where he was a professor of law.

Hemphill holds a JD and PhD in economics from Stanford, an AB from Harvard, and an MSc in economics from the London School of Economics, where he studied as a Fulbright Scholar. He has also served as antitrust bureau chief for the New York Attorney General and clerked for Judge Richard Posner of the US Court of Appeals for the Seventh Circuit and Justice Antonin Scalia of the Supreme Court.

Renata Hesse
Partner
Sullivan & Cromwell LLP
Renata Hesse is a leading antitrust lawyer and co-head of Sullivan & Cromwell’s Antitrust Group. Her practice focuses on antitrust counseling, cartels and merger clearance, with a particular emphasis on the intersection of antitrust and intellectual property matters in high-tech industries. She has been recognized by The International Who’s Who of Competition Lawyers, Chambers USA for Antitrust, and Euromoney’s Benchmark Litigation on its list of the “Top 250 Women in Litigation” and as a “Local Litigation Star.”

D. Bruce Hoffman
Partner
Cleary Gottlieb Steen & Hamilton LLP
D. Bruce Hoffman’s practice focuses on antitrust enforcement, including merger clearance and conduct investigations, and antitrust and other complex commercial litigation. Bruce joined the firm as a partner after serving as Director of the Federal Trade Commission’s Bureau of Competition from August 2017 until late December of 2019. As Director, he was the head of the FTC’s antitrust enforcement and was responsible for developing Bureau policy, supervising all of the Bureau’s investigations and litigation, and conducting high-level relations with other leading antitrust enforcers, including the U.S. Department of Justice Antitrust Division, the Directorate-General for Competition of the European Commission and other international enforcers, and state Attorneys General, as well as communications with Congress. Bruce also spearheaded the creation of the Bureau of Competition’s Technology Task Force (now known as the Technology Enforcement Division) to monitor competition in U.S. technology markets, investigate potential anticompetitive conduct in those markets, and take enforcement actions when warranted.

Bruce’s role as Bureau Director was his second stint at the FTC. He previously served at the agency from 2001-2004, starting as Associate Director for Regional Litigation and then being elevated to Deputy Director of the Bureau of Competition. In these roles, Bruce oversaw the Bureau’s programs, activities, and investigations. He also led numerous high-profile cases involving mergers, price fixing, monopolization, conspiracies, and other issues in a broad range of industries, and he participated in amicus brief efforts before the U.S. Supreme Court.
Prior to joining the FTC in 2001, and then again from 2005 to 2017, Bruce developed and led successful antitrust practices as a partner at leading global law firms. Bruce had an extensive merger review practice, including transactions before the DOJ, FTC, EC, several U.S. states, and other enforcers. He also has wide-ranging experience in high-profile antitrust litigation and investigations, including representing clients in some of the largest antitrust class actions ever filed, as well as competitor lawsuits and conduct investigations. Bruce has handled every aspect of federal and state court litigation, including appellate arguments, jury and bench trials, and numerous court hearings and arguments, as well as arbitration proceedings.

**Johannes Holzwarth**  
Policy Officer  
DG Competition

Johannes Holzwarth is a Case Handler Officer at DG Competition’s Unit A1 – Antitrust case support and policy. In this position, he provides procedural and substantive support to case teams investigating and analyzing antitrust cases and develops policy and law in the field of antitrust.

Johannes is part of the team that works on the revision of the Vertical Block Exemption Regulation and the Vertical Guidelines. Previously, he was a Policy Officer at DG Competition's Unit A4 – European Competition Network and Private Enforcement where he analyzed antitrust policy developments at EU and Member State level and followed up on the implementation of the Damages Directive.

Before joining the European Commission, Johannes advised companies on competition law matters as an attorney at an established German law firm. He received a Doctorate degree in law (Dr. iur.) from the University of Münster (Germany) and was awarded a Master of Laws degree (LL.M.) from the University of Chicago (USA).

**Merit Janow**  
Dean and Professor of International and Economic Law and International Affairs  
Columbia University

Merit E. Janow is an internationally recognized expert in international trade and investment. She has extensive experience in academia, government and business, and has had life long involved with Japan and the Asia-Pacific region.

Janow became Dean of the faculty of Columbia University’s School of International and Public Affairs (SIPA) in July 2013, a position she will conclude in December 2021. As Dean of SIPA, she has strengthened the school by launching new programs in the areas of technology & public policy; central banking and financial policy; and key regions of the world. She has also expanded the faculty, supported the creation of new research centers; and undertaken two ambitious capital campaigns for SIPA. For the past 25 years, she has been a professor at both SIPA and Columbia Law School. She teaches graduate courses on trade and the digital economy, international trade and investment law and policy, comparative antitrust law, and China and Asia in the global economy. She has held a number of leadership positions at the University. She is co-director of the APEC Study Center at Columbia Business School, and previously served as Chair of the
Committee for Socially Responsible Investing which oversees the proxy voting of shares owned by the Columbia University endowment. Janow has written three books and numerous articles and frequently speaks before business, policy, and academic audiences around the world.

Professor Janow has had three periods of government service. In December 2003, while at Columbia University, she was elected as one of the seven Members of the World Trade Organization’s (WTO) Appellate Body. In the course of her four years of service, she reviewed more than 30 appeals. From 1997-2000, Janow served as the Executive Director of the first international antitrust advisory committee to the Attorney General and Assistant Attorney General for Antitrust of the US Justice Department. From 1989 to 1993, prior to joining Columbia, Janow served as Deputy Assistant USTR for Japan and China in the Executive Office of the President. In this capacity she was responsible for developing, coordinating, and implementing U.S. trade policies and leading sectoral trade negotiations with Japan and China. She negotiated more than a dozen trade agreements. Janow serves on a number of corporate and nonprofit boards. Early in her career, she was a corporate lawyer specializing in cross-border mergers and acquisitions with Skadden, Arps, Slate, Meagher & Flom in New York. She grew up in Tokyo, Japan and speaks Japanese. She has a JD from Columbia Law School where she was a Stone Scholar and a BA in Asian Studies from the University of Michigan.

Frédéric Jenny
Professor of Economics
ESSEC Business School and Chairman, OECD Competition Committee
Frédéric JENNY holds a Ph.D in Economics from Harvard University (1975), a Doctorate in Economics from the University of Paris (1977) and an MBA degree from ESSEC Business School (1966) He is professor of Economics at ESSEC Business School in Paris. He is Chairman of the OECD Competition Committee (since 1994), and Co-Director of the European Center for Law and Economics of ESSEC (since 2010). He was previously Non-Executive Director of the Office of Fair Trading in the United Kingdom (2007-2014), Judge on the French Supreme Court (Cour de cassation, Economic Commercial and Financial Chamber) from 2004 to August 2012, Vice Chair of the French Competition Authority (1993-2004) and President of the WTO Working Group on Trade and Competition (1994-2003) He was visiting professor at Northwestern University Department of Economics in the United States (1978), Keio University Department of economics in Japan (1984), University of Cape town Business School in South Africa (1991), Haifa University School of Law in Israel (2012). He was Visiting Professor at University College London Law School (2005-2010), Global Professor of Antitrust in the New York University School of Law’s Hauser Global Law School (2014 and 2017) and Senior Fellow in the Online Global Competition and Consumer Law Master’s Program, University of Melbourne (Australia)( 2016-2018).

Frederic Jenny has written extensively about trade, competition and economic development and has served as an adviser to many developing countries on competition and trade issues.

Dina Kallay
Head of Antitrust (IPR, Americas & Asia-Pacific)
**Ericsson**
Dina Kallay is Head of Antitrust (IPR, Americas and Asia-Pacific) at Ericsson, a world-leading provider of telecommunications equipment and services. Her responsibilities cover global antitrust matters including antitrust counselling, policy, compliance and litigation.

Prior to joining Ericsson in 2013, Dina served as Counsel for Intellectual Property and International Antitrust at the U.S. Federal Trade Commission, where she focused on worldwide antitrust-IP, multilateral, and Asian competition matters. Prior to that, Dina practiced antitrust law at a number of law firms, most recently with the Washington DC office of Howrey LLP. She also worked as in-house antitrust counsel for Microelectrónica Española. In 2000-2001, Ms. Kallay clerked at the European Commission Directorate General for Competition (DG COMP) Unit for Information Industries and Consumer Electronics, where she worked on unilateral conduct and intellectual property related enforcement and policy matters.

She holds an LLM and an SJD from the University of Michigan Law School, and is a frequent writer and speaker on international antitrust and antitrust-IP topics.

**James Keyte**
**FCLI Director and Adjunct Professor of Law, Fordham Law School; Director of Global Development, The Brattle Group**

Mr. Keyte is directly engaged in project oversight across all of Brattle’s competition and antitrust engagements both in the US and globally. His extensive practical experience, along with his deep antitrust expertise, gives Brattle a unique perspective that adds enormous value to our expert engagements.

Mr. Keyte previously spent more than twenty years as a partner at Skadden, where he handled a wide variety of antitrust litigation, transactions, and advisory matters across numerous industries. He led high-profile antitrust cases involving alleged price-fixing, monopolization, mergers, intellectual property licensing, and sports-related matters, including class actions. He was also involved in a number of high-profile mergers, several of which involved litigation challenges by the US Department of Justice (DOJ) and the Federal Trade Commission (FTC). Mr. Keyte is the Director of the Fordham Competition Law Institute (FCLI), which he will continue to lead, and has published more than 50 articles related to antitrust across a wide range of topics, including on the subject of expert testimony. He is an adjunct professor at Fordham Law School, a former editor of Antitrust Law Journal, and currently serves as editor of Antitrust Magazine. He holds a J.D. from Loyola Law School (Law Review) and a B.A. from Harvard University (cum laude).

**Robert Klotz**
**Partner, Sheppard Mullin**

Robert Klotz is a partner in Sheppard Mullin’s Antitrust & Competition Practice Group in the firm's Brussels office. Robert concentrates on all aspects of EU and German competition and regulatory law and represents clients before the European Commission and national authorities, with a particular focus on network industries, such as energy, telecommunications, post and transport.
Previously he served for almost a decade as an official of the European Commission in DG Competition, dealing with high level antitrust cases, mainly in regulated industries such as telecoms and energy.

Robert Klotz is Co-Editor of a leading EU competition law treatise (in German language) as well as Co-Managing Editor of CoRe (European Competition and Regulatory Law Review). In addition he teaches EU competition law to master students from all parts of the world, at Freie Universität Berlin, at the Center for European Integration (ZEI) Bonn, and at the Europa-Institut Saarbrücken.

William E. Kovacic
Global Competition Professor of Law and Policy
The George Washington University Law School
Before joining the law school in 1999, William E. Kovacic was the George Mason University Foundation Professor at the George Mason University School of Law. From January 2006 to October 2011, he was a member of the Federal Trade Commission and chaired the agency from March 2008 to March 2009. He was the FTC’s General Counsel from June 2001 to December 2004. In 2011 he received the FTC’s Miles W. Kirkpatrick Award for Lifetime Achievement. Since August 2013, Professor Kovacic has served as a Non-Executive Director with the United Kingdom’s Competition and Markets Authority. From January 2009 to September 2011, he was Vice-Chair for Outreach for the International Competition Network. He has advised many countries and international organizations on antitrust, consumer protection, government contracts, and the design of regulatory institutions.


Education
BA, Princeton University; JD Columbia University
Kai-Uwe Kühn  
**Academic Advisor**  
**The Brattle Group**  
Kai-Uwe Kühn is a Professor of Economics at the University of East Anglia who has advised on all aspects of competition matters for 25 years. He has served as the Chief Economist of DG Competition, European Commission.

Kai-Uwe Kühn is a Professor of Economics and Deputy Director of the Centre for Competition Policy at the University of East Anglia. He holds visiting appointments at the Düsseldorf Institute for Competition Economics (DICE) and Georgetown University. From May 2011 to August 2013, Prof. Kühn was Chief Economist at DG Competition, European Commission. He has advised competition authorities and private firms on competition policy as well as merger, state aid, and antitrust cases for 25 years.

His consultancy work has covered the whole range of competition matters from policy issues (e.g. the Commission Notice on Market Definition (1997), the 1997 Green paper on Vertical Restraints, the 2010 Vertical Guidelines) to mergers (e.g. GE/Honeywell merger (2001) including the court appeal), and antitrust matters (e.g. the Microsoft I on server interoperability). Most recently he acted as an expert in a large number of cartel damages cases, advised on complex antitrust cases (e.g. hotel bookings and another MFN case, radius clauses, and novel forms of exploitative abuses such as privacy and other contractual terms), as well as large number of merger cases in different jurisdictions. During his time as Chief Economist, he advised the Competition Commissioner on all competition cases and policy initiatives (in particular State Aid Modernization) and led the economic analysis on many large mergers (e.g. Deutsche Börse/NYSE, UPS/TNT, Universal/EMI, H3G/Orange Austria, Western Digital/Hitachi, Outokumpu/Inoxum) and antitrust cases (e.g. Google, e-books, and the Standard Essential Patent cases), often in close cooperation with counterparts at the US agencies. Prof. Kühn spent most of his academic career as a tenured Associate Professor of Economics at the University of Michigan. His research includes theoretical, experimental, and empirical industrial organization covering a wide range of topics including durable goods, vertical integration, vertical restraints, market foreclosure, the impact of credit constraints on market behaviour, as well as collusion and the coordinated effects of mergers. It has been published in leading journals like the Journal of Political Economy, the Rand Journal of Economics, the American Economic Journal: Microeconomics, and the Journal of the European Economic Association. He has been the co-editor of the Journal of Industrial Economics.

Mary Jane Lee  
**Managing Director and General Counsel**  
**Citigroup, Inc**  
Mary Jane Lee is a Managing Director and General Counsel in the Office of the General Counsel at Citigroup, managing litigation for the Institutional Clients Group, which includes markets, sales and trading, investment banking, and the Private Bank. Mary Jane has overseen a broad array of high-profile antitrust and securities class actions, as well as bankruptcy proceedings and other complex commercial litigation. Prior to joining Citi in 2010, Mary Jane practiced litigation and regulatory enforcement in-house at Deutsche Bank and Verizon. Mary Jane began her career at Kirkland & Ellis, representing public and private companies in litigation and
Karen Hoffman Lent  
Partner  
Skadden, Arps, Slate, Meagher & Flom LLP  
Karen Hoffman Lent is associate director of the Fordham Competition Law Institute. As a partner at Skadden, Lent represents a wide variety of clients in antitrust, sports, and other complex litigation matters at both the trial and appellate court levels. She also provides general antitrust counseling, advising clients on compliance with basic antitrust statues, including issues relating to competitor collaborations, unilateral conduct, and distribution.

She has handled antitrust litigation involving price-fixing, group boycotts, monopolization, other restraints of trade, and class actions, and her clients have included Pfizer Inc, NewYork-Presbyterian Hospital, International Paper Company, and IASIS Healthcare. In antitrust and sports law, she has extensive experience counseling professional sports leagues and teams, and she has represented the NCAA, NBA, NFL, NHL, Office of the Commissioner of Baseball, and Arena Football league in litigation, and she has provided advice on various issues to Madison Square Garden, the PGA Tour, and the Colleague Licensing Corporation. Sports Business Journal named her a 2016 Power Player in sports law and featured her on its 2013 40 Under 40 list.

Education  
J.D., Fordham Law School, 1999 (Law Review)  
B.S., Johns Hopkins University, 1995

Bar Admissions  
New York  
U.S. Courts of Appeals for the Second, Fourth, and Ninth Circuits  
U.S. District Courts for the Eastern and Southern Districts of New York

Scott Martin  
Partner  
Hausfeld  
Scott is co-chair of the firm’s Antitrust practice group. Scott’s perspective is a unique one, as prior to joining the firm in 2015, he played major roles in defending antitrust and class action cases as a partner in two leading international law firms. Over the course of more than 25 years, he also has negotiated resolutions of numerous regulatory investigations and actions on behalf of corporate clients. Scott’s practice extends to bench and jury trials in both federal and state courts, complex federal multidistrict actions, class actions involving direct and indirect purchasers, parens patriae cases, FTC and DOJ investigations as well as other regulatory actions, and qui tam litigation. OVERVIEW Scott Martin Partner New York smartin@hausfeld.com +1 646 357 1195 https://www.linkedin.com/pub/scott-martin/10/100/747 Clients Scott has two decades of counseling experience across a broad range of industries on pricing, distribution, competitive intelligence, joint ventures, and non-compete agreements, among other competition issues, and
has designed antitrust compliance programs for some of the world’s largest corporations. He received his J.D. from Stanford Law School.

Margot Miller  
Global Legal Director  
Anheuser-Busch InBev

Margot Miller is the Global Legal Head of M&A, Antitrust and Treasury at Anheuser-Busch InBev in New York City. As the head competition and transactional lawyer at AB InBev, she supports the global M&A and Treasury teams and advises on a variety of global antitrust issues, including pricing and promotional practices, and the creation and implementation of compliance programs. Before joining AB InBev, Margot was associated with Cravath, Swaine & Moore LLP in New York City. She holds an undergraduate degree from the University of Pennsylvania, and a J.D. from Columbia University.

Dr. Serge Moresi  
Vice-President  
Charles River Associates

Dr. Serge Moresi is an expert in the theory of industrial organization and specializes in applied game theory, including bidding and bargaining models as well as applied microeconomics theory, including search markets, network effects, and two-sided markets. He is an experienced developer of theoretical models and simulation programs dealing with strategic interactions among market participants. Dr. Moresi has provided clients with expert economic consulting services in many merger cases, antitrust litigations, damages cases, and regulatory proceedings spanning a large number of industries in North America, Europe, and Australasia.

Dr. Moresi is the author of several publications and conference papers on a variety of topics, including market definition, merger effects analysis, and the economics of distribution and franchising. Before joining Charles River Associates, he served as Assistant Professor of Economics at Georgetown University from 1991 to 1998.

Peter Mucchetti  
Partner  
Clifford Chance

Peter Mucchetti is a partner in Clifford Chance's antitrust and litigation practices in Washington, D.C. He has more than two decades of antitrust litigation, investigations, and merger clearance experience in a wide variety of industries. Peter is a Vice Chair of the Healthcare and Pharmaceuticals Committee of the ABA Antitrust Law Section.

Prior to joining Clifford Chance, Peter worked at the US Department of Justice Antitrust Division, where he was the Chief of its Healthcare and Consumer Products Section. In that role, he supervised some of the most complex cases in the Antitrust Division's history. Peter also previously served as a Special Assistant United States Attorney in the Eastern District of Virginia, worked in private practice, and clerked for the Honorable Lee H. Rosenthal in the
Southern District of Texas. Peter received his J.D. from Harvard Law School and a B.A. in economics from Yale University. He also served as a Peace Corps volunteer in Bolivia.

Andreas Mundt
President, Bundeskartellamt
Chair of the International Competition Network
Andreas Mundt has been President of the Bundeskartellamt since 2009, member of the Bureau of the OECD Competition Committee since 2010 and the Steering Group Chair of the International Competition Network since 2013.

After qualifying as a lawyer, Andreas Mundt entered the Federal Ministry of Economics in 1991. In 1993 he joined the staff of the Free Democratic Party in the German Parliament. In 2000 he joined the Bundeskartellamt as rapporteur and later acted as Head of the International Unit and Director of General Policy.

Timothy J. Muris
Senior Counsel
Antitrust/Competition Sidley Austin
Timothy Muris advises clients on all aspects of antitrust enforcement, with a particular focus on mergers, civil investigations and strategic counseling. He also has significant experience with consumer protection issues, including advertising and privacy regulation. Tim represents clients before the Federal Trade Commission (FTC), the Department of Justice, the European Commission and other domestic and international agencies.

Tim was chairman of the FTC from 2001 to 2004, where he oversaw the creation of the National Do Not Call Registry, increased antitrust scrutiny of intellectual property issues, and challenged fraudulent and deceptive advertising and health claims to protect U.S. consumers. Prior to being elevated to chairman, Tim was director of the Bureau of Consumer Protection and director of the Bureau of Competition. He is the only person ever to head both of the agency’s enforcement bureaus.

Over his career Tim has been recognized by Chambers USA as a leading lawyer in antitrust and is described as “one of the most knowledgeable people in the business.” Chambers Global, Legal 500 and Best Lawyers in America have also commended him for his work. Timothy received his law degree from the University of California at Los Angeles and his undergraduate degree from San Diego State University.

Gabriella Muscolo
Commissioner
Autoritá Garante della Concorrenza e del Mercato
Since May 2014, Gabriella Muscolo is a Commissioner at the Italian Competition Authority.
Appointed as a Judge in 1985, she sat at the Specialist Section for Intellectual Property and Competition Law in the District Court of Rome and at the Court for Undertakings in Rome. From 2009 to 2014, she was appointed member of the Enlarged Board of Appeal-EBA of the European Patent Office-EPO.

Since 2018, she is a Fellow of the Centre of European Law of King's College London. Since 2019, she is a member of the Board of Trustees of ERA (Academy of European Law) and of the Advisory Board of the ERA Forum (Journal of the Academy of European Law). Since 2020, she is member of the Advisory Board of Concurrences e-Competitions Bulletin Boards.

Since 2008, Gabriella Muscolo has been lecturer of Company Law at the School of Specialization for Legal Professionals at the University of Rome – La Sapienza. She also lectured at Italian and foreign Universities such as Université de Strasbourg, CEIPI-Centre d’Étude International de la Propriété Intellectuelle, Technische Universität Dresden, Universidad de Alicante, Queen Mary University, University of Washington, CASRIP- Center for Advanced Studies and Research in Seattle and Waseda University in Tokio.


**Susan Ning**
Partner
**King & Wood Mallesons**

**Areas of Practice** Antitrust and Competition Law; Cybersecurity and Data Compliance

Ms. Ning holds a Bachelor of Law from Peking University and a Master in Law from McGill University. She was admitted as a Chinese lawyer in 1988.

Ms. Ning joined King & Wood Mallesons in 1995. She is a partner and the head of the Compliance Group. Ms. Ning’s main areas of practice include antitrust and competition law, and cybersecurity and data compliance. In addition, Ms. Ning also practices international trade and investment law.

**Antitrust and Competition Law**

With the implementation of the Anti-Monopoly Law (AML) on August 1, 2008, Ms. Ning began to fully engage in the area of AML and anti-unfair competition law. Her practice in this area mainly includes merger control filings, antitrust investigations, compliance and antitrust litigation.

King & Wood Mallesons officially established its Antitrust Group in 2003, which was the first specialized practice division in this area among Chinese law firms. Prior to the enactment of the AML in 2008, Ms. Ning took a very active role in assisting and consulting with the Chinese
government on the drafting of the AML. Since the enactment of the AML, she continued to be actively involved in drafting regulations, measures for implementation and guidelines accompanying the AML. Through these consultations and her extensive experiences in helping clients to deal with antitrust investigations, Ms. Ning built and maintained a close working relationship with the antitrust authorities in China.

Since 2003, Ms. Ning and her team have undertaken hundreds of merger control filings on behalf of clients, mostly consisting of multinational corporations from industries such as chemicals, semiconductors, luxury goods, transportation, hotels, automobiles, high technology, finance, trade, telecommunications, energy and the Internet. Ms. Ning has also assisted a number of clients on confidential investigations of cartel conducts, resale price maintenance and abuse of dominance and represented several landmark litigation cases in relation to monopoly agreements and abuse of dominance. Ms. Ning has advised a number of clients regarding establishing and improving their antitrust and competition compliance systems and conducting internal audits.

John Oxenham
Director
Primerio

John has practiced in the regulatory, commercial litigation and antitrust fields locally and across the African region for over 20 years. He has been recognized as a leader in his field for many of these. Recently, John represented Business at the OECD as the first regional representative. John has acted in many of the leading antitrust, commercial litigation and regulatory matters in South Africa and the region and has extensive experience in dealing with all types of competition law matters, from merger filings to highly complex and cutting-edge precedent setting cases. John has advised several multinationals in all areas of competition law including merger control. He has been a partner in a major South African firm, co-founder of a South African practice and the founder of a Pan-African legal group. John has not only been recognized by various publications for his expertise in competition law but has also recently received recognition by the International Who’s Who for his role in complex commercial litigation, anti-fraud and corruption

Jack Pace
Partner
White & Case, LLP

Jack Pace is a core member of White & Case's leading global antitrust litigation practice, which is ranked by Chambers USA in Band 1 and Legal 500 in Tier 1 for cartel matters and has won the Competition Group of the Year award from Law360 more than any other firm has, an unprecedented seven times. The Firm's antitrust practice has been named as one of the Global Competition Review's "Global Elite" and is ranked in the top 5 of that publication's "GCR 100" rankings.

Jack is Head of the Competition Section for the Firm’s Americas Region.

Drawing upon energy and creativity well known to the Firm's clients, Jack has achieved major victories in many complex litigation matters, including jury verdicts (in antitrust, unfair
competition, and RICO actions), appellate victories (Asacol antitrust litigation, Doryx antitrust litigation, GM seeds antitrust litigation), dismissals of antitrust claims on the pleadings and at summary judgment (numerous "reverse payment" and "product hopping" cases, Black v. JP Morgan Chase, VantageScore antitrust litigation), and groundbreaking defeats of class certification (Asacol antitrust litigation, GM seeds antitrust litigation, court reporting unfair competition litigation).

Jack successfully has represented clients in numerous trials and other litigation settings against private parties, federal prosecutors, and state attorneys general. He also has represented many leading global companies in class action litigation matters at the cutting edge of antitrust and intellectual property law.

Jack has been recognized as a leading litigator and antitrust lawyer by several publications. Jack is ranked in Chambers (where clients reported "he is responsive, strategic and sees the big picture") and as a Leading Lawyer by Legal 500 US in the Civil Litigation/Class Actions category. Jack is also a two-time "MVP" in Law360, winning the award in the Life Sciences category 2015 and in the Competition category in 2011. Jack also was named a "Rising Star under age 40" among US competition lawyers by Law360 in 2013 and a "Rising Star" among all lawyers in New York City by the New York Law Journal in 2013.

Jack works with clients across a broad spectrum of industries, including technology, pharmaceuticals, financial services, fintech, agriculture, energy, and insurance.

He has done extensive work on behalf of the Firm's pro bono clients, in cases involving domestic violence, criminal appeals, and special education. He is also the Chair of the Board of Reach Out and Read of Greater New York, a not-for-profit organization focused on school readiness and early literacy.

Representative cases include the following:

- **Antitrust and innovation**
  Successfully defended Allergan in nationwide antitrust class action litigation regarding the company's leading Botox® Cosmetic product. The plaintiffs sought to prevent competition by blocking an exclusive license agreement that would create new competition in the sale of injectable neurotoxins in the United States.

  Successfully defended several leading pharmaceutical and medical device manufacturers against antitrust challenges to the prosecution and enforcement of intellectual property rights. Successfully defended several leading pharmaceutical manufacturers against antitrust challenges to the launch of new products.

  In a noteworthy example, represented Allergan/Warner Chilcott in litigation brought by competitor Mylan, challenging Warner Chilcott's transition to new versions of its Doryx acne treatment.
Jack and the White & Case team obtained dismissal of all of Plaintiff’s claims on summary judgment, representing the first-ever victory for a defendant on a full evidentiary record in a so-called pharmaceutical "product hopping" litigation. The Third Circuit Court Appeals affirmed the client’s victory, creating the only appellate precedent in favor of a defendant in a "product hopping" case.

Class action defense
Successfully represented defendants from a variety of industries facing class actions and achieved precedent-setting victories in defeating class certification, including in the Asacol Antitrust Litigation (1st Circuit), the GM Seeds Antitrust Litigation (8th Circuit), and the Loestrin Indirect Purchaser Antitrust Litigation (1st Circuit).

Fintech
Representing Apex Clearing Corporation in antitrust and securities law challenges relating to so-called "short squeeze" efforts by traders of meme stocks. Advising various fintech and financial services companies on antitrust compliance, joint ventures, and new service offerings.

Thomas Pease
Partner
Quinn Emanuel Urquhart & Sullivan, LLP

Tom Pease is a partner in Quinn Emanuel’s New York office who specializes in the trial of intellectual property and antitrust disputes across a wide range of technologies and industries. Tom has served as lead counsel in numerous cases involving standard essential patents (SEPs) subject to FRAND obligations arising under the IPR policies of standard setting organizations (SSOs) including ETSI, 3GPP, IEEE, H.264, JEDEC, and ISO/IEC. Tom has also appeared in several international arbitrations involving patents and antitrust issues, and has represented clients in connection with DOJ, FTC and DG Comp. investigations. He also has extensive licensing and patent monetization experience, and advises companies concerning artificial intelligence (AI), blockchain/cryptocurrency, and other current technologies of interest to the FinTech community.

Tom frequently speaks on IP, FRAND, and competition issues and has appeared several times as a panelist at the Fordham IP Conference and the UIC John Marshall Law School’s Intellectual Property Conference. Tom recently taught a PLI course on patent monetization and conducted a mock US patent infringement trial at Peking University before several hundred Chinese lawyers and jurists.
Noah Phillips  
Commissioner  
Federal Trade Commission  

Richard Powers  
Acting Assistant Attorney General  
Department of Justice Antitrust Division  
Richard Powers currently serves as Acting Assistant Attorney General of the Department of Justice Antitrust Division, and is the Division’s Deputy Assistant Attorney General for Criminal Enforcement. He joined the Division through the Honors Program, working in Atlanta and then New York, where he prosecuted cartel and fraud cases in the financial services industry. He also spent two years at the Criminal Division Fraud Section’s Healthcare Fraud Unit in the Eastern District of New York, prosecuting complex, multimillion dollar health care fraud and related schemes. A West Point graduate, Richard served in the U.S. Army as an infantry officer and received a Bronze Star and Combat Infantryman’s Badge for his service in Iraq. Richard holds a J.D. from the University of Alabama.

Sharis Pozen  
Partner  
Clifford Chance LLP  
Sharis Pozen is the Co-Head of the Global Antitrust Practice at Clifford Chance. She has extensive experience in both government and private practice. Over the course of her career, Sharis has held senior positions at GE, the U.S. Department of Justice, the U.S. Federal Trade Commission and two major law firms based in New York and Washington, D.C. Prior to joining Clifford Chance, Sharis was the Vice President of Global Competition Law and Policy at GE, where she was responsible for merger clearance on numerous significant, transformational deals, steering global antitrust investigations to positive conclusions, antitrust compliance and other related issues.

Sharis is one of the few antitrust practitioners who has served in high-level positions at both the U.S. Department of Justice and the U.S. Federal Trade Commission. While working at a major New York-based law firm, Sharis was a partner and a leader in their antitrust and competition practice, where she advised clients on a broad spectrum of antitrust issues related to mergers and acquisitions, litigation, criminal investigations and counseling.
across national and multinational industries, including technology and telecommunications, health care and pharmaceutical, energy, financial services, transportation and agriculture. While serving as acting assistant attorney general at the U.S. Department of Justice, Sharis led many high-profile matters and worked extensively with leaders of international antitrust authorities. She also oversaw several criminal antitrust matters.

Prior to working at the U.S. Department of Justice, Sharis was a partner at a major Washington, D.C.-based firm, where she served as a director of the firm’s Antitrust Group. Her practice focused on antitrust issues and trade regulation across a broad spectrum of industries.

James F. Rill
Senior Counsel
Baker Botts

James F. Rill is a Senior Counsel at Baker Botts LLP. He is actively engaged in representation of firms involved in merger and unilateral conduct activities before U.S. and foreign antitrust agencies. Mr. Rill served as Assistant Attorney General in charge of the U.S. DOJ Antitrust Division and as Chair of the ABA's Section of Antitrust Law. During his tenure as Assistant Attorney General, he negotiated the U.S.-European Union Antitrust Cooperation Agreement of 1991 and issued the first joint FTC and DOJ Horizontal Merger Guidelines in 1992. In 1997, Mr. Rill was appointed by Attorney General Janet Reno and Assistant Attorney General Joel Klein as Co-Chair of the Justice Department’s International Competition Policy Advisory Committee, with a mandate to recommend future international antitrust policy initiatives. The recommendations in the Committee’s February 2000 report are being pursued in the U.S. and overseas. Mr. Rill was Chairman of the BIAC representation to the OECD Competition Committee from 2005-2007 and Vice-Chairman from 1993-2005. He was Vice-Chairman of the Competition Committee of the United States Council for International Business from 1993-2014. Mr. Rill currently serves on the ABA Section of Antitrust Law International Task Force. He was honored in 2011 by the Global Competition Review and the ABA Section of Antitrust Law with their Lifetime Achievement Awards. In 2012, the U.S. Department of Justice presented Mr. Rill with the John Sherman Award for his lifetime contributions to consumer welfare, economic liberty, and international antitrust cooperation.

John Roberti
Partner
Allen & Overy

John leads Allen & Overy’s Washington D.C. Antitrust practice and is a member of the firm’s Investigations and Litigation practice. For nearly 25 years, John has guided clients through complex merger and civil investigations involving a wide range of complex issues. His practice currently involves many of the most significant cartel matters ongoing in the United States, including representing the largest auto parts manufacturer in the world, one of three pre-packaged seafood suppliers, a large electronic component supplier, and a global energy supplier in major class actions.
John is an alumnus of the Federal Trade Commission (FTC), which, along with the experience developed in private practice, gives him insight into the workings of the FTC and the U.S. Department of Justice’s (DOJ) Antitrust Division. John also has handled high-profile trials and litigation in both private practice and also during his tenure with the FTC, and represents clients in high stakes class action litigation.

Clients say John “provides top-tier advice and responsiveness, and demonstrates real expertise in the field.” Chambers USA, Legal 500, and Who’s Who Legal Competition have recognized John as a leading antitrust lawyer for many years. Clients report that John is “incredibly intelligent and well-versed in all things antitrust,” and “analyzes issues quickly and is extremely flexible.” He receives praise from clients for “always finding the perfect balance between pragmatic solutions while sticking to ethics and high-value standards.”

John is the host of the American Bar Association Antitrust Law Section’s weekly podcast, Our Curious Amalgam, and was awarded the ABA Antitrust Law Section Outstanding Performance Award, 2020-2021. He is the pro bono partner for Allen & Overy’s Washington, DC office, and was selected as a member of the Allen & Overy Leadership Academy. John also is a Fellow of the American Bar Foundation and serves on two non-profit boards supporting children with special needs.

Academic qualifications
- J.D., New York University School of Law, 1994
- B.A., Brown University, 1991

Alan Ryan
Partner
Freshfields

Alan is a founding partner of our Silicon Valley office. He is relocating from our Brussels office where he was an antitrust partner with nearly 30 years' experience before the European Commission and courts and national competition authorities.

Alan’s practice focuses on European competition and regulatory law. At the European Commission, he worked on almost 100 EU Merger Regulation cases, including many phase two cases, phase one with remedies and difficult phase one unconditional clearances. He has also successfully defended and brought complaints for abuse of dominance and anti-competitive agreements and secured total release from cartel proceedings for clients. Alan is additionally an experienced litigator before the European and national courts, and has worked on five appeals of EU Merger Regulation decisions at the European General Court delivering a successful outcome for his clients each time as well as a variety of cases across the spectrum of EU competition law in the General Court and Court of Justice and before national courts.
Alan has achieved many “firsts” for his clients on cases which are now precedent-setting. For example, he delivered the first successful appeal of an EU Merger Regulation prohibition in over 15 years (UPS), the complete defense of clients as varied as Amadeus in an Article 102 case before the French competition authority (Optionizr), Emirates in the air cargo case and several unconditional phase one clearances in the face of determined opposition (Navitaire) and successful complaints leading to prohibition of mergers (GE/Honeywell and Ryanair/Aer Lingus).

Alan works for clients across industries but is well-known for his success in high-tech, life sciences and transportation. He recently stepped down as co-head of the firm's global infrastructure and transport sector group following a five-year term.

He enjoys the challenge of difficult cases, where it is necessary to drive the case, rather than simply follow it. Alan maintains an in-depth understanding of all his clients’ businesses and his aim is always to further their interests in the most effective manner possible.

Brian Savage
General Counsel
U.S. Generics Business of Teva Pharmaceuticals

Brian Savage is General Counsel for the US Generics business of Teva Pharmaceuticals, one of the world’s largest drug generic manufacturers. An antitrust litigator by background, Brian provides antitrust and other strategic legal advice to Teva’s US commercial team, while also helping manage the company’s portfolio of antitrust and other commercial litigation matters.

Howard Shelanski
Partner; Professor of Law
Davis Polk & Wardwell LLP; Georgetown University

Howard Shelanski earned his B.A. from Haverford College and received his J.D. and Ph.D. in economics from the University of California at Berkeley. After graduating from law school he clerked for Judge Stephen F. Williams of the U.S. Court of Appeals for the D.C. Circuit, Judge Louis H. Pollak of the U.S. District Court in Philadelphia, and Justice Antonin Scalia of the United States Supreme Court. After practicing law in Washington, D.C., Professor Shelanski joined the Berkeley faculty in 1997, where he remained until coming to Georgetown in 2011.

Professor Shelanski has held several positions in the federal government. From 2013 to 2017, he served as Administrator of the White House Office of Information and Regulatory Affairs (OIRA). Before President Obama nominated him to OIRA, Professor Shelanski was Director of the Bureau of Economics at the Federal Trade Commission from 2012 to 2013, where he had previously been Deputy Director from 2009 to 2011. Earlier in his career, he was Chief

In addition to being a member of the Georgetown Law faculty, Professor Shelanski practices antitrust law and is a member of the law firm of Davis Polk & Wardwell LLP.

Professor Shelanski’s teaching and research focus on antitrust and regulation. In addition to numerous articles, he has co-authored leading casebooks, treatises and edited volumes in both antitrust and telecommunications law. A selection of Professor Shelanski’s scholarship can be found by clicking the scholarship and publications link on this page.

Tim Simcoe
Associate Professor of Strategy & Innovation
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Professor Simcoe has consulted on licensing of standard essential patents and testified as an expert witness in several Federal Court cases, including Apple vs. Motorola (W.D. Wisconsin, 2011), Microsoft vs. Motorola (W.D. Washington, 2012), Fujitsu vs. Tellabs (N.D. Illinois, 2014), and Apple vs. Qualcomm (S.D. California, 2017). Professor Simcoe has also testified regarding damages for pharmaceutical patent infringement in ViiV Healthcare vs. Gilead Life Sciences (District of Delaware, 2018).

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The Co-Chair of the Firm’s Antitrust and Competition Practice, Ian Simmons has been lead counsel in more than 32 multi-district litigation (MDL) antitrust proceedings and has achieved precedent-setting results. With 29 years of experience in antitrust litigation, Ian is one of a few lawyers listed in both the Litigation and Competition Who's Who Legal directories. In addition to his extensive experience with cartel cases, Ian litigates matters involving intellectual property
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An alumnus of the US Department of Justice Antitrust Division, Ian’s career has been highlighted by several “firsts:” he was trial counsel in the first jury trial price fixing case to attack a wholly foreign conspiracy; he argued and won in the US Court of Appeals for the Ninth Circuit in what it called “a case of first impression” on the preemption of state antitrust laws; he is counsel to Bitcoin.com and Roger Ver in the first antitrust case involving crypto currency; and he is counsel to Samsung Bioepis in the first “pay for delay” case involving biosimilars. In 2019, the National Law Journal, in recognizing the DC office as litigation department of the year, singled out the $3 billion summary judgment victory for Samsung Electronics. Ian’s results have been recognized by Law360, which named Ian an MVP of the Year in Competition.

Who’s Who Legal highlights Ian’s “superb attention to detail, excellence in written and oral advocacy and subtle judgement on strategy,” noting that peers and clients consider him “a super smart litigator with great instincts.” Chambers USA regularly ranks Ian for his work in antitrust litigation, and notes his “fine reputation for his multijurisdictional cartel defense work” and reports that clients describe him as “outstanding and incredibly skilled,” commend his “detail-oriented work,” and praise his “encyclopedic knowledge.” Ian is consistently recognized for his work in antitrust by Legal 500, which labels him a “star of the antitrust bar” along with O’Melveny’s team as “top-drawer,” and by Global Competition Review who recently lauded him for his Samsung victory against Qualcomm in 2017 and shortlisted him for “Litigator of the Year” at the 2015 Global Competition Review awards. Ian has also been named a 2017 Antitrust Trailblazer by the National Law Journal, a leading lawyer by Who’s Who Legal: Litigation in 2017, and a competition expert by Who's Who Legal: Competition in 2018.

An expert in the doctrine at the intersection of intellectual property and antitrust law, including FRAND and the law of Standard Setting Organizations, Ian represented Samsung as an amicus in FTC v. Qualcomm, a filing whose content made its way into the District Court opinion denying Qualcomm’s motion to dismiss. He defeated class certification on a multi-billion-dollar price fixing claim involving Optical Disk Drives in the Northern District of California against Samsung and other major technology companies and obtained a highly significant victory for Asiana Airlines Inc. in long-running antitrust litigation, which extinguished hundreds of millions of dollars of potential exposure. Ian also represented Marriott International in an antitrust MDL involving online travel company booking; the complaint was dismissed with prejudice. An eight time moderator or panelist at the American Bar Association Antitrust Spring meeting, and author of over 20 peer review articles, Ian is a Member of the Editorial Board of the American Bar Association Antitrust Magazine.

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Prior to joining Brattle, Dr. Smith was an Executive Vice President at an international economics consulting firm, and prior to that worked at the US Federal Trade Commission as a staff economist. While at the FTC, he oversaw several high-profile merger and conduct investigations, supported litigations, and evaluated settlements. He also coauthored a report to Congress and provided technical assistance and training to competition agencies in South Africa, Brazil, and Hungary.

Dr. Smith has taught microeconomics and econometrics at the University of Virginia and Johns Hopkins University. His research is published in academic journals including Journal of Applied Econometrics, Economic Inquiry, and Journal of Economics and Management Strategy.

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Most recently, Josh was lead counsel for Deutsche Telekom in connection with T-Mobile's successful merger with Sprint Corporation. He is presently defending BNSF Railway Company in more than 100 cases involving an alleged conspiracy to implement fuel surcharges and represents Google in a number of government inquiries.

Since entering private practice in 2012, Josh has obtained timely approval of complex, strategic transactions for a range of prominent companies, including AECOM, Ameristar, Deutsche
Telekom, Fiserv, Francisco Partners, Hewlett-Packard, LinkedIn, Marriott, Matson, Mulesoft, Norbord, Northwell Health, The Southern Company, St. Jude Medical, and Tenet Healthcare. Previously, Josh served in leadership and trial counsel roles at both U.S. antitrust agencies. From 2007 to 2012, Josh was Chief of the Litigation I Section of the DOJ's Antitrust Division, where he directed all of the division's investigations and litigation challenges in the health insurance, consumer products, packaging, beer, and dairy sectors. His work at DOJ included the successful litigation challenge in the leading antitrust case involving the use of most-favored nation clauses, United States v. Blue Cross Blue Shield of Michigan, and the only DOJ Section 2 monopolization case in the last 10 years, United States v. United Regional Health Care System. He also handled the investigation of, and negotiation of, divestiture agreements for the following transactions: International Paper/Temple-Inland; Graphic Packaging/Altivity Packaging; UnitedHealth Group/Sierra Health Services; and InBev/Anheuser-Busch. In addition, Josh served as a trial attorney in the division's Networks & Technology Enforcement Section, where he directed investigations in the software, electronic payment systems, and financial services fields, including the department's successful litigation challenge to the First Data/Concord merger, United States v. First Data (DDC).

From 2004 to 2007, Josh was an Attorney Advisor to FTC Chairman Deborah Platt Majoras, advising her on antitrust enforcement and policy matters. Earlier in his career, he was a special assistant in the U.S. Attorney's Office in Alexandria, Virginia. Josh also served as a law clerk for the Honorable Robert G. Doumar, U.S. District Court for the Eastern District of Virginia. Josh is currently an editor of the American Bar Association's (ABA's) Antitrust Magazine, and he is a former editor of the ABA's Antitrust Law Journal. He has spoken at many conferences on antitrust enforcement issues and served as a lecturer at the Kellogg School of Management at Northwestern University, where he co-taught a course on strategy and competition policy in the healthcare sector.

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Henry Su is a seasoned trial lawyer and partner at Bradley Arant Boult Cummings LLP, in its Washington, DC office. Henry focuses his practice in the fields of antitrust, intellectual property, technology, and consumer protection law. He offers clients a unique combination of experience and expertise in (1) law enforcement, regulation, legislation, and policymaking—as a former senior official with the U.S. Federal Trade Commission (FTC) for nearly seven years, and (2) technology, innovation, business strategy, and startup activity—as a Silicon Valley-based senior litigator for nearly ten years.

Henry’s government service at the FTC included two stints as a senior trial lawyer in the agency’s Bureau of Competition (January 2013 to February 2015, February 2017 to August 2017), litigating merger and conduct cases (e.g., St. Luke's/Salzer, 1-800 Contacts) and participating in the investigation of several others. He also served as an attorney advisor to Commissioner J. Thomas Rosch (January 2011 to January 2013) and Chairwoman Edith Ramirez (February 2015 to
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Before joining the FTC, Henry was a partner with two firms in their Silicon Valley offices. There his practice encompassed not only disputes involving antitrust and unfair competition but also those involving intellectual property infringement and theft (e.g., patents, trade secrets). He is licensed to practice before the United States Patent and Trademark Office as a registered patent attorney.

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Prior to joining the Federal Trade Commission in 1998, Mr. Tritell was a partner with Weil, Gotshal & Manges LLP. Following six years in the firm’s New York office, in 1992 he opened the firm’s Brussels office where he practiced European Community and international competition law. Mr. Tritell began his career at the Federal Trade Commission, serving as a staff attorney in the Bureau of Consumer Protection, Assistant to the Bureau of Consumer Protection Director Timothy Muris, Attorney Advisor to Commissioner Terry Calvani, and Executive Assistant to the Chairman.

Mr. Tritell obtained his law degree from the University of Pennsylvania Law School, where he was an Editor of the Law Review, and his Bachelor of Arts degree from the Stony Brook University in New York.

Mr. Tritell is active in the American Bar Association, in which he serves as co-chair emeritus of the International Comments and Policy Committee of the Antitrust Law Section and on the Steering Committee of the Antitrust Committee of the International Law Section. He is a member of the Advisory Board of the Journal of Antitrust Enforcement and of the Fordham Competition Law Institute. He is a frequent lecturer and author on international antitrust issues.

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She has successfully assisted companies in obtaining conditional immunity with the European Commission and other competition law agencies in and outside the EU. Ms. Vandenborre also is representing companies in proceedings before the European General Court against European Commission findings of cartel infringements, and is involved in the defense against civil claims arising from these findings. Recent representations include the immunity and leniency applicants in the EU power cables and car battery recycling cartel investigations, respectively. She currently serves as non-governmental adviser to the intergovernmental International Competition Network in relation to matters concerning cartel enforcement and private litigation.

Ms. Vandenborre is a graduate of the Catholic University of Leuven in Belgium and completed part of her law studies at Duke University School of Law. She holds an LL.M. degree from the University of Chicago Law School and is an alumna of the Belgian American Educational Foundation.

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Executive Vice-President for A Europe Fit for the Digital Age and Competition, European Commission  
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Commissioner for Competition, European Commission  
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Minister for Economic Affairs and the Interior, Denmark  
2011-2014

Political Leader of the Social Liberal Party, Denmark  
2007-2014

Member of Parliament, Denmark  
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Minister for Education, Denmark  
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Dr. Mike Walker is currently the Chief Economic Advisor at the UK Competition and Markets Authority. Previous to this he was a Vice President at CRA International in London. He has worked on the economics of competition law and regulation for almost thirty years. He is the co-author of The Economics of EU Competition Law (Sweet & Maxwell, 3rd edition, 2009) and a number of published articles. He is a Professor at the College of Europe in Bruges and a Visiting Fellow at King’s College, London.


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Kirsten Webb is the leader of Clayton Utz's national competition practice group. She operates across the competition and consumer law spectrum in Australia, handling sensitive merger clearance, key advisory and enforcement matters with notable recent experience in the pharma, telecommunications, digital and retail sectors. Kirsten is a member of the Future of Competition Law Standards Task Force of the American Bar Association’s Antitrust Law Section and is a member of the International Bar Association and Law Council of Australia, Competition and Consumer Law Committee. Chambers Asia-Pacific, Legal 500 Asia-Pacific, Who's Who Legal, GCR and Euromoney Women in Business Law all recognise Kirsten as a leading practitioner in Competition/Antitrust.

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Koren Wong-Ervin is a recognized thought leader and has testified before Congress on domestic and international antitrust issues. She has more than sixteen years of experience, including representing defendants and plaintiffs in high-stakes litigations and representing technology companies in domestic and foreign investigations. Koren previously served at the Federal Trade Commission as Counsel for Intellectual Property and International Antitrust and as an Attorney Advisor to Commissioner Joshua Wright.

Koren is a frequent speaker and author, including training hundreds of foreign judges and competition enforcers on antitrust law and economics. She has spoken at over 100 domestic and international events and written dozens of articles on a variety of topics, including the intersection of antitrust and intellectual property, mergers, vertical restraints, platforms, incremental innovations or “product hopping,” optimal penalties, extraterritoriality, methodologies for calculating patent infringement damages, and international due process and convergence.
PROFESSIONAL ACTIVITIES

- ABA Antitrust Law Section, numerous leadership positions (2009-Present)
- Co-Chair, Competition/Consumer Protection Policy and North American Comments Task Force (2019-Present)
- Member, Due Process Task Force (2018-2019)
- Member, International Task Force (2016-2019)
- Co-Chair, Antitrust in Asia Conference (2015-2016)
- Vice Chair, Intellectual Property Committee (2012-2015)
- Editorial Board, ANTITRUST LAW DEVELOPMENTS 7TH (two-volume treatise) (2009-2012)
- USG Non-Government Advisor, International Competition Network (2017-Present)
- Committee Member, Business at OECD (2017-Present)
- Advisory Board Member, Fordham University School of Law Competition Law Institute (2019-Present)
- Co-Editor, LEXIS-NEXIS Antitrust Report Publication (2020-Present)

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Tim Wu works in the White House as special assistant to the President for Technology and Competition policy. He was previously an antitrust and telecommunications scholar at Columbia law school, and has also previously worked in the Federal Trade Commission and at the New York Attorney General’s Office. He is the author of several books, including the “The Master Switch,” “The Attention Merchants,” and “The Curse of Bigness” and is also the co-author, with Scott Hemphill, of the paper “Nascent Competitors.”

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Dr. Zhang leads Brattle’s Asia Antitrust & Competition Practice, and is an expert in applying economic analysis to competition, industrial organization, and intellectual property issues for clients across numerous industries in Greater China, the US, and the EU.

Throughout her career, Dr. Zhang has worked on a wide array of matters involving allegations of monopolization, foreclosure practices, vertical restraints, cartels, merger analysis, damages, FRAND, and intellectual property. She has provided antitrust economic trainings to the Chinese regulatory agencies and judges, and assisted agencies with economic analysis in their merger reviews. She has consulted on projects across numerous industries, such as transportation, chemical, e-commerce, payment card, banking, pharmaceutical, high tech, electricity, telecommunication, and consumer products.

In China, Dr. Zhang has testified as an expert witness and submitted expert reports before the Supreme People’s Court of China (SPC), Provincial Higher Courts, the State Administration for
Market Regulation (SAMR), the Anti-Monopoly Bureau of Ministry of Commerce (MOFCOM), the National Development and Reform Commission (NDRC), and Shanghai Administration for Market Regulation (SHAMR). MOFCOM and SAMR often retain Dr. Zhang on global mergers, including Agrium/PotashCorp and SONY/SenseScene.

Dr. Zhang has advised merging parties including KLA Tencor/OrboTech, Didi/Uber China, and Yum! /Little Sheep. On behalf of Tencent, Dr. Zhang served as an expert in Qihoo 360 v. Tencent resulting in favorable decisions at the SPC and Guangdong High Court, which was the first antitrust case ruled on by the SPC. She has also served as an expert for Qualcomm in Apple v. Qualcomm and NDRC investigation against Qualcomm, as well as for other multinational and Chinese companies such as Eastman Chemical, Motorola, Shell, and NetEase to successfully defend allegations related to antitrust, IP, and unfair competition.

In addition to her consulting work, Dr. Zhang is a Senior Research Fellow at the Renmin University of China Market and Regulation Law Center (MRLC), and has taught regulation and antitrust economics to graduate students. Dr. Zhang has edited several books in both English and Chinese, written numerous articles and contributed to books on China’s merger control regime and Anti-Monopoly Law (AML), and authored extensively for respected publications including the Journal of Competition Law and Economics, Review of Industrial Organization, and the Antitrust Chronicle (in addition to serving on its advisory board). Prior to joining Brattle, Dr. Zhang was a Managing Director at an international economics consulting firm.
PLATFORMS, ENTRY, AND INNOVATION

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1. INTRODUCTION

There is vigorous debate over the ability of the current antitrust enforcement regime in the United States to protect against potential reductions in competition caused by large technology companies, sometimes referred to as the “Tech Titans.” Some commentators have argued that current antitrust rules and processes cannot address adequately the competition issues presented by large technology companies and that a special set of rules or revisions to the antitrust laws are necessary to regulate their conduct. Others have argued that existing antitrust doctrine and processes are well-equipped to address any potential anticompetitive conduct by large technology companies, but have warned that such doctrine and processes are ill-suited to addressing non-economic questions such as the political power of specific companies. In this paper, we address the role of antitrust policy as it pertains to large platforms, focusing in particular on one important area of this debate: what restrictions, if any, should apply when a firm with a large market share (“large firm”) in one market begins to operate in another market, either by *de novo* entry (e.g., product innovation) or through acquisition.

Some commentators have raised the possibility that companies with certain characteristics, such as large technology companies, introduce competition concerns that cannot adequately be addressed by this existing antitrust infrastructure. Such commentators have proposed policies that would have the effect of applying a different set of rules to certain types of companies. These proposals include:

- Placing “bright-line” restrictions on the ability of companies meeting certain criteria to enter new markets, especially via acquisition of other companies.⁵

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⁴ Democratic Party candidates for president in 2020 have made antitrust, especially as it relates to large tech companies, a focus of their campaigns. See, e.g., Elizabeth Warren (2019), “Here’s how we can break up Big Tech,” https://medium.com/@teamwarren/heres-how-we-can-break-up-big-tech-9ad9e0da324c (hereinafter Warren (2019)).


Elizabeth Warren has also called for legislation to impose line-of-business restrictions on “platform utilities,” and has specifically stated that she would appoint regulators committed to reversing consummated mergers, including Amazon’s acquisitions of Whole Foods and Zappos, Facebook’s acquisition of WhatsApp and Instagram, and Google’s acquisition of Waze, Nest, and DoubleClick. See, e.g., Warren (2019).
● Preventing companies that meet certain criteria from advertising or promoting certain services and/or treating their own services preferentially.6

● Requiring that companies that meet certain criteria must operate distinct lines of business through separate affiliates.7

● Requiring that companies that meet certain criteria must not operate both a platform and a participant on that platform.8

Such policies would have the effect of favoring certain organizational structures over others. Specifically, they seek to prevent “platform” sponsors from competing in services upstream or downstream from their platforms even if such organizational structures would be procompetitive. Such proposals potentially would insulate incumbents from competition by preventing entry by viable competitors. As a result, such policies would be counterproductive to the goals of antitrust policy, which are principally to promote competition.

Such proposals are economically unsound for several reasons, including:

● The existing antitrust enforcement framework is already well-suited to address concerns and to deploy rigorous analytical tools to investigate and, if necessary, to seek injunctions against anticompetitive practices.

● Proposals requiring platforms to be “neutral” between their own products/services and those of rivals amount to a de facto ban on achieving the procompetitive advantages of vertical integration.

● Entry and expansion are generally procompetitive because they enhance competition in existing industries or create new industries that can lead to large increases in consumer welfare. Policies that inhibit such entry and expansion risk reducing rather than enhancing consumer welfare.

These reasons support our main conclusions: (i) the United States antitrust enforcement agencies and laws are well-suited to preserve competition in the technology sector and to address instances of entry or expansion into adjacent markets; (ii) proposals raised by commentators that would fundamentally alter this system would upend well-established antitrust legal and economic standards and are likely to generate results that are contrary to the missions of antitrust authorities; and (iii) with respect to the specific questions raised by the entry of large technology companies into new markets, entry generally, absent specific circumstances that current tools are

6 Warren (2019).
7 Khan (2019).
8 Warren (2019) (proposing that any company with global revenue exceeding $25 billion and that offers an online marketplace, exchange or platform for connecting third parties could not also act as a participant on that platform and specifically identifying Amazon Marketplace, Google’s ad exchange, and Google Search as meeting these criteria).

Electronic copy available at: https://ssrn.com/abstract=3662430
already well-situated to address, enhances competition and benefits consumers. Accordingly, modifications to current tools that serve to deter entry absent such circumstances would be detrimental to competition and to consumer welfare.

In the remainder of this paper, we explain our reasons for these conclusions in greater detail.

2. **COMPETITION ENHANCES WELFARE**

A core principle of antitrust policy is that competition enhances consumer welfare. Competition can take many different forms. In this section, we discuss the mechanisms by which competition benefits consumers.

A. **Consumers Benefit from Competition**

When considering whether to raise prices or lower quality, any firm, even a monopolist, faces a fundamental trade-off between earning greater profits on customers who remain with the firm (what economists call “inframarginal” customers) and losing the profits associated with customers who leave the firm in response to price increases or quality decreases (“marginal” customers).

The presence of more attractive competitive options increases the number of marginal customers who would find it beneficial to switch to another firm in response to a price increase or quality decrease, which puts downward pressure on prices and/or upward pressure on quality. Similarly, actions that lower costs (e.g., production efficiencies) make the acquisition of additional

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10 Similar logic applies in reverse to decisions about whether to lower prices or increase quality.
customers more profitable and thus create incentives to lower prices and/or increase quality to attract such customers.

In the case of price decreases, for example, when the increase in profits earned from the additional sales is greater than the decrease in revenue from lowering prices on existing customers, a price reduction will allow the firm and customers to share in the benefits of the realized efficiencies by simultaneously lowering the prices that customers pay and also increasing the profits that the firm earns relative to what it could otherwise achieve. Reaching this conclusion does not require one to view firms as charities. Rather, self-interested firms will earn greater profits by taking such actions. Moreover, this principle does not rely on any specific form of competition. The only requirement is that the firm sell fewer units as it raises price (or, conversely, sell more units if it lowers price), for example because some customers decide that it is no longer worth it to buy the product (economists refer to this as the “law of demand”).

Quality improvements have similar implications for consumer welfare. As long as the increase in profit earned through additional sales generated by improving product or service quality exceeds the cost of a quality improvement, a quality improvement will allow firms and their customers to share in the benefits of realized efficiencies by increasing consumer benefits by more than any associated price increases and also increasing firm profits.

B. Entry and Expansion Enhance Competition

Greater competition, for example via the entry and/or expansion of new competitors, amplifies the effects described above. When customers have more options, rival firms will have to offer more attractive products to attract and retain customers. The presence of greater competition creates downward pressure on prices and upward pressure on quality.11 The benefits of entry and expansion can arise both from de novo entry and from existing firms that reposition into a new market in response to a perceived profit opportunity.12

Beyond the direct effect of enhancing competition, entry also can enhance product variety. Because customers have heterogeneous preferences for products, the existence of product variety makes it more likely that a customer will find a product that most closely matches her


12 See, e.g., David Besanko, David Dranove, Mark Shanley & Scott Schaefer (2012), Economics of Strategy, Wiley, Sixth Edition, p. 197. (“An entrant may be a new firm, that is, one that did not exist before it entered a market. An entrant may also be a firm that is active in a product or geographic market but has chosen to diversify into others. The distinction between new and diversifying firms is often important, as it may affect the costs of entry and the appropriate strategic response.”) For empirical evidence, see, e.g., Robert M. Feinberg (2010), “Price Impacts of Small-Firm Entry in US Manufacturing,” Eastern Economic Journal, 36:36-69.
preferences. Such matching of customers to products can be extremely valuable to customers and competition.\textsuperscript{13}

Entry into a market for Product A also generally will benefit customers of a complementary Product B.\textsuperscript{14} Complementary products are products for which demand increases because of an increase in value of the other product. Thus, entry that increases competition in the market for Product A will make complementary Product B more valuable to consumers. A canonical example is that of printers and ink cartridges. A printer without ink has little or no value. “Entry” of new or more capable printers will not only directly benefit consumers but also increase the value of and demand for compatible ink cartridges.

Even commentators who have proposed expanding or revising the scope of antitrust enforcement have recognized the importance of entry and the central role that technology platforms play in that process. For example, a recent study published by the George J. Stigler Center for the Study of the Economy and the State at the University of Chicago Booth School of Business concluded that “[l]ess entry into digital markets means fewer choices for consumers, stunted development of alternative paths of innovation, higher prices, and lower quality.”\textsuperscript{15} The study further concluded that rival platforms are often best situated successfully to enter and compete in adjacent markets.\textsuperscript{16}

\textbf{C. Competition, Including from New Platform Entrants, Drives Innovation}

Innovation can be especially beneficial to consumers when it creates new products, services, and/or processes that did not previously exist. The existence of such new products can both improve the productivity of the overall economy and lead to large consumer welfare gains. Although it is difficult to quantify the exact value that technological innovation contributes to the overall economy, it is well-established that creating incentives to innovate is a central objective


\textsuperscript{14} Complementary products, by definition, have a negative cross-price elasticity of demand. In other words, there is an inverse relationship between the price of Product A and demand for Product A’s complements. Therefore, if entry into the production of Product A causes its price to fall, demand for the complements of A should rise. See, e.g., Phillip E. Areeda & Herbert Hovenkamp (2019), \textit{Antitrust Law}, ¶422, footnote 4 (“Higher prices for one product generally reduce the demand for its complements.”)

\textsuperscript{15} \textit{Scott Morton et al.}, p. 59.

\textsuperscript{16} \textit{Scott Morton et al.}, pp. 50 (“A rival platform with similar economies of scope, data insights, and installed base may be a more formidable entrant.”); 54 (“One of the few sources of entry in digital platforms comes from rival platforms that enter each other’s markets, as these large firms are more able to overcome entry barriers of all kinds.”)
of a well-functioning modern economy. And many studies have shown that innovation has produced enormous benefits for the U.S. economy and consumers.

As a result, innovations—and related benefits to consumers—directly are affected by the proper enforcement of the antitrust laws. The relationship between competition and innovation is an area of past and current research by academic economists. This research reflects the contrast between two fundamental ideas, both of which are reflected in the Horizontal Merger Guidelines quoted above: (1) that competition creates incentives for firms to innovate; and (2) that large firms may have greater incentive and/or ability to invest in research and development or are the result of successful innovation that resulted in products and services that are attractive to customers. Moreover, the empirical literature on the relationship between competition and

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17 See generally “Economic Report of the President,” Counsel of Economic Advisers, March 2019 (describing the role of innovation across a range of industries). See also, e.g., “Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition,” U.S. Department of Justice & Federal Trade Commission, 2007, pp. 1, 3. (“Intellectual property laws create exclusive rights that provide incentives for innovation… Recognizing that both robust competition and intellectual property rights are crucial to a well-functioning market economy, the Agencies conducted a series of hearings….“)


innovation is somewhat mixed and subject to data limitations.21 As we discuss further below, the inherent complexity of this relationship between competition and innovation means any analysis of the effects of a specific action or merger on innovation is likely to be context-specific and fact-intensive, and one-size-fits-all policies are unlikely to generate broadly beneficial outcomes.

3. Goals for Appropriate Competition Policy

The present antitrust enforcement framework provides a flexible and constantly evolving vehicle for addressing issues related to the efficient operation of the economy. Misapplication or circumvention of this framework risks harming the very consumers that antitrust laws are meant to protect. In this section, we briefly summarize three principles of appropriate competition policy:

- Appropriate competition policy should balance the benefits and harms of any particular action.
- Appropriate competition policy should protect competition and consumers, not competitors.
- Appropriate competition policy should address competition issues and not be used to achieve other policy objectives.

In our view, although the first two principles are largely uncontroversial in the United States, many of the proposals and complaints regarding technology companies tend to ignore these important tenets. The last principle apparently has become more controversial recently, as many commentators seem to view competition policy as a convenient tool to achieve other ends.

A. Appropriate Competition Policy Should Balance Expected Harms and Benefits

As discussed in the introduction, antitrust enforcement seeks to maximize consumer welfare by considering the net effect of actions that may affect both efficiency and competition. A policy that inappropriately discounts the importance of efficiency or competition will tend to reduce consumer welfare. For example, policies that inappropriately discount the role of efficiencies in mergers will tend to block mergers that would enhance consumer welfare through the realization of those efficiencies. Conversely, policies that inappropriately discount the role of competition may allow mergers that would reduce consumer welfare through the diminution of competition.

§§ 6.4 and 10 (hereinafter 2010 Horizontal Merger Guidelines) (“[c]ompetition often spurs firms to innovate” and merger “efficiencies may spur innovation.”)

See generally Shapiro (2012).

What is clear from the research is that the relationship between competition and innovation is complex and there is no basis generally to claim that large firms retard innovation. (See, e.g., Mahdiiyeh Entezarkheir & Saeed Moshir). (2016), “Innovation: Evidence from a Panel of U.S. Firms,” mimeo, available at https://ssrn.com/abstract=2808061. (The authors find that innovation is positively correlated with mergers and that larger firms experience a greater increase in innovation following mergers.)
Analytical tools used by antitrust enforcers explicitly consider and quantify these trade-offs. For example, economic models designed to simulate the effects of prospective mergers explicitly balance potential harm from the loss of a competitor against potential efficiencies that may be achieved by combining two firms. Similarly, models of vertical integration provide a rigorous and internally consistent framework with which to balance the beneficial effects of such integration (e.g., the elimination of double marginalization) against the potential for adverse effects on competition (e.g., the foreclosure of rivals). Such models provide a coherent framework with which to assess the net effects of a merger and to determine whether the merger would or would not enhance consumer welfare.

An advantage of using an economic model or framework is that it requires the analyst to make explicit assumptions about the relevant factors to be modeled, including, for example, the nature of demand, the costs of production, and the sources of competition. By making assumptions explicit, economic models can be calibrated to observable data and their conclusions tested for robustness to alternative assumptions.

In addition, in regard to single-firm anticompetitive conduct, antitrust agencies almost always focus on whether the conduct has been harming consumers. This is appropriate because the competitive effects of single-firm conduct almost always is competitively ambiguous.

**B. Appropriate Competition Policy Should Protect Competition, not Competitors**

It is well understood by antitrust practitioners that the objective of antitrust policy should be to preserve and enhance competition and protect consumers. Antitrust policy should not seek to protect specific competitors. The reason for this posture is intuitive. Competition itself often benefits consumers while harming certain competitors. For example, entry by a low-cost competitor will benefit consumers by injecting price competition into the market even as it makes it harder for incumbent firms to sustain their profit margins. Similarly, investing in new

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Electronic copy available at: https://ssrn.com/abstract=3662430
products and services can benefit consumers while increasing competitive pressure on rivals. Although owners of incumbent firms may find this loss of profits to be dissatisfying, sound antitrust policy should encourage rather than discourage such competition.

Critics of large tech platforms express concern about actions of this type that would normally be viewed as procompetitive. For example, Lina Khan states that “[a]lthough Amazon has clocked staggering growth—reporting double-digit increases in net sales yearly—it reports meager profits, choosing to invest aggressively instead.” Such aggressive investment in new products and services is typically beneficial to consumers.

In certain situations, the central goal of antitrust policy to protect competition may also protect certain competitors. Raising rivals’ costs, increasing competitors’ input prices to weaken them as competitors in downstream markets, is a good example. Under some circumstances, strategies that raise rivals’ costs may be anticompetitive. Policies that inhibit such strategies benefit both competitors by lowering their costs and competition by intensifying it.

However, some critics seek to move antitrust enforcement beyond a consumer welfare standard, arguing that purportedly dominant platforms should be specifically constrained from acquisitions or expansion in order to protect “competition as a process” or to “preserve opportunities for competitors.” In the view of these critics, consumers are unlikely to switch away from the “default” products provided by a platform operator, even if it would be in their interest to do so, thereby suppressing competition. In fact, some critics turn the ease-of-switching in technology markets on its head, arguing that because consumers are likely to find it “too easy” to switch from the services of a non-platform-affiliated firm to those offered by the platform itself, asymmetric rules are necessary to prevent dominant platforms from “aggregating” demand in new verticals to themselves, at the expense of existing and potential competitors.

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25 Khan (2016).


29 Scott Morton et al., p. 19.

These proposals lose sight of the central objective of appropriate antitrust policy: the protection of consumers. If consumers experience lower prices, higher quality, greater choice of services, or increased ease of switching as the result of the entry of a platform company into a new vertical, such effects are generally and appropriately seen as positive developments, despite the costs to competitors. Except in the extreme case where monopolization is likely to occur, competition created by the entry of platforms into new verticals is typically a source of increased consumer surplus, not consumer harm. Proposals to limit platform activity or expansion without a showing of consumer harm would effectively transfer this value from consumers to less efficient competitors, reducing both output and overall welfare.  

Indeed, product innovation by digital platforms is fundamentally no different than innovation by other companies, and thus should not be judged by different standards. For example, if Toyota innovates a new form of steering wheel design that displaces one of its suppliers, that is not regarded by antitrust economics—and the antitrust laws—as anticompetitive. Instead, it is considered procompetitive. The steering wheel suppliers might lose the competition with Toyota, or they might out-innovate Toyota and reestablish themselves. Either way, consumers benefit from better steering wheels spurred by Toyota’s innovation.

The same is true of platforms. When platform businesses add new features to their existing products that compete with services provided by existing companies, this is a form of procompetitive product innovation. For example, when Google adds features to Google Search like boxes providing Maps, Local, and other so-called “universal” answers, Google is innovating to provide these answers to users faster and better. As a result, users spend less time searching for the information they want, allowing them to work more efficiently and otherwise freeing them to do other things. Restricting such innovations mitigates or eliminates these benefits for users and serves to protect pre-existing business models.

The decision by a successful company to enter into a new market often introduces new pro-consumer competition to business models in industries that benefit from such disruption. For example, Uber used its existing network of drivers to enter the food delivery marketplace through UberEats, creating a new consumer alternative to rival delivery providers like Postmates and GrubHub. Indeed, whole new product lines often develop, such as game streaming platforms or connected cars, that depend on these incentives to innovate.

See, e.g., Orly Lobel (2016), “The Law of the Platform,” Minnesota Law Review, 101:87-166, p. 120. (“Attempts at extending permit requirements – what the industry interests often call ‘leveling the playing field’ between ride-sharing companies and taxi companies, or between other platform companies and the businesses they disrupt – are generally harmful to the evolution of the platform and to competitive markets more broadly. Under capture theory, industry players extract rents from special permitting, licensing, and other regulatory requirements…. By designing around these resulting rents, platform businesses create value for consumers as well as push incumbents to become more efficient and responsive in novel ways.”)

As the DC Circuit noted in Microsoft, it would be illogical for antitrust to penalize a company for inventing a “self-repairing copier” just to protect competitors in the market for copier repairs. (United States v. Microsoft, 147 F.3d 935 at 950.)

Often, these consumer benefits come through acquisitions. For example, Google’s ability to show a map as an answer to a query originated from several early acquisitions that it used to build Google Maps and Google Earth, including geospatial data visualization company Keyhole, and realtime traffic analysis company ZipDash.\textsuperscript{34} Although these acquisitions were important for the early development of Maps, Google has devoted significant resources itself to create the innovative product many use today. Similarly, Microsoft has enhanced the value to users of its Windows platform by providing productivity features through its acquisition of LinkedIn\textsuperscript{35} and messaging/videochat features through its acquisition of Skype.\textsuperscript{36}

Adding such product features or new lines of business are key ways that platforms compete. For example, Apple and other companies have been developing their own TV and movie streaming services, which competes with the market leader Netflix for viewer attention. Facebook added Messenger, which competes with Apple iMessage and Gchat. Uber added UberEats, which competes with delivery services such as Grubhub and Doordash. Banning or restricting such additions could readily reduce output, harming consumers, who would have fewer options.

It was precisely because innovation benefits consumers that the FTC statement closing its Google investigation noted that Google’s design changes likely benefited consumers and were therefore procompetitive, even if individual competitors were harmed.\textsuperscript{37}

\begin{itemize}
\item[35] “Satya Nadella email to employees on acquisition of LinkedIn,” Microsoft News Center, https://news.microsoft.com/2016/06/13/satya-nadella-email-to-employees-on-acquisition-of-linkedin/#sm.0000juho8orrbdovvzj1vd52sxb44.
\item[37] See also In re Intel Corp., No. 9341, “Decision and Order,” US Federal Trade Commission, August 4, 2010 § V.A, available at http://www.ftc.gov/sites/default/files/documents/cases/2010/08/100804inteldo_0.pdf (prohibiting Intel from making “any engineering or design change to a Relevant Produce if that change (1) degrades the performance of a Relevant Product sold by a competitor of [Intel] and (2) does not provide an actual benefit to the Relevant Product sold by [Intel]” (emphasis added)); In re Intel Corp., No. 9341, “Analysis of Proposed Consent Order to Aid Public Comment,” US Federal Trade Commission, August 4, 2010, available at http://www.ftc.gov/sites/default/files/documents/cases/2010/08/100804intelanal_0.pdf (“The Proposed Consent Order would be violated if a design change degrades performance of a competitive or complementary product and Intel fails to demonstrate an actual benefit to the Intel product at issue.”).
\end{itemize}
C. Appropriate Competition Policy Should Focus on Competition Issues

Many advocates of more vigorous application of antitrust enforcement targeted at large tech companies openly seek to advance goals other than the promotion of competition and consumer welfare. For example, commentators have focused on issues such as the aggregation of political power, income inequality, media channel diversity, local business ownership, privacy, data protection, and other factors not directly related to market power.\textsuperscript{38} Regardless of the merits of such concerns, competition policy is ill-suited to address such issues. This is true in part because the rigorous analytical framework that the antitrust agencies use to enforce competition rules is not designed to assess and weigh the value of criteria that do not relate to competition.

Although this fact likely leads some commentators to consider current antitrust enforcement to be too narrow, misuse of antitrust policy to address non-competition issues would likely worsen such problems and lead to unintended consequences. For example, competition policy that inhibited firms from operating efficiently would tend to lower consumer welfare overall and thus harm the people it is meant to protect. Issues such as income or wealth inequality, and political power are better addressed directly through non-competition regulation.

4. Antitrust Enforcement Provides Appropriate and Flexible Tools to Promote Competition

As described in this section, the existing set of analytical tools and structures provides an appropriate framework with which to address issues raised by commentators. Moreover, the DOJ and FTC, along with the offices of state AGs and private plaintiffs, have the expertise necessary to apply these tools in an appropriate and flexible way. Indeed, proposals to provide greater resources to those agencies would serve to enhance the objectives that these commentators seek to achieve without the need for new \textit{ad hoc} antitrust policies.

Antitrust policy seeks to preserve and enhance competition by application of laws designed to ensure that companies have strong incentives to operate efficiently and to compete on the bases of price and quality. Broadly speaking, competition will be more effective when firms can operate efficiently (i.e., at low cost for any given level of quality) and when competition among rival firms is supported. In short, greater competition is good and enhances consumer welfare. And one important facet of competition in markets that are operating efficiently is innovation and expansion by competing firms. This general principle indicates that the regulatory and legislative proposals that aim to make it easier to restrict line-of-business expansions by “platform companies,” such as those urged by Senator Warren and others,\textsuperscript{39} would harm competition.

A. Merger Enforcement

One of the core missions of the DOJ and FTC is to review, and where necessary, seek to enjoin mergers they have deemed to be anticompetitive. The Clayton Act provides the agencies broad scope to challenge mergers that substantially would lessen competition. And the Hart-Scott-Rodino (HSR) Act requires all transactions above a certain minimum value ($90 million in 2019)

\textsuperscript{38} See, e.g., Khan (2016), Khan (2019).

\textsuperscript{39} See, e.g., Warren (2019), Khan (2019), and Feld (2019).
to report the merger to the agencies for review. Hence, the agencies have broad scope to enjoin anticompetitive mergers and are frequently successful in doing so.

In 2017, the latest year for which data are available, the DOJ and FTC received more than 2,000 premerger notifications. The vast majority of premerger notifications are uncontroversial and raise no competitive issues. The DOJ filed 11 cases to enjoin mergers (nine of which resulted in a settlement and two of which went to litigation), and caused seven additional transactions to be restructured or abandoned as a result of an announced challenge. Similarly, in 2017, the FTC challenged 23 transactions, of which 15 resulted in consent decrees, six were abandoned, and two resulted in litigation. Prior years demonstrate similar patterns.

The agencies often have been successful in challenging mergers. For example, the DOJ won all 104 cases brought under Section 7 of Clayton Act and that terminated between 2008 and 2017, and the FTC won or favorably settled every merger it challenged between 1999 and 2016.

The consumer welfare standard has not prevented DOJ and FTC from taking on companies with entrenched power in industries central to American life. For example, the DOJ recently has challenged the mergers of major health insurers, as well as blocking one proposed Google transaction—the proposed search agreement with Yahoo—and extracting significant behavioral concessions in Google’s 2011 acquisition of flight information provider ITA. And, in recent years, the FTC has challenged a long list of mergers in the hospital and pharmaceutical industries. Most prominent industries, including the tech industry, have been subject to merger challenges, and civil and criminal enforcement.

Other than the amount of commerce at issue, there is nothing especially unique about large mergers or mergers involving companies in specific industries, including technology platforms. Moreover, such mergers already receive enhanced scrutiny from the regulatory agencies for at least two reasons. First, large firms are more likely to trigger concentration thresholds that result


Although it falls outside the reporting time period, the DOJ was recently unsuccessful in its challenge of the AT&T/Time Warner transaction.
in enhanced scrutiny. Second, prosecutorial discretion allows the agencies to focus particular attention on mergers that potentially would have a large impact on consumer welfare now or in the future, including mergers involving large technology platforms.

**B. Anticompetitive Practices**

Agencies also have broad scope to challenge company business practices that harm competition and do not involve mergers or acquisitions. For example, Section 2 of the Sherman Act covers single-firm conduct and makes it illegal for firms to “monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations.” This statute gives the DOJ and FTC broad latitude to challenge any conduct that does not have a legitimate business justification and harms competition. Moreover, some commentators have argued that the FTC has even greater discretion to challenge conduct it deems “unfair” through Section 5 of the FTC Act, although the FTC rarely has used its powers under Section 5 to challenge firm conduct that does not violate Section 2 of the Clayton Act.

And the agencies enforce these statutes where warranted. For example, in the 1970s and early 1980s, DOJ took on IBM, the dominant force in mainframe computing, leading IBM to make behavioral concessions that allowed the “PC revolution” to emerge. In the 1990s, DOJ took on Microsoft, then the dominant force in personal computing, again extracting concessions that allowed the growth of the modern consumer Internet. In the 2000s, FTC took on Intel and Rambus, leading chipmakers.

With respect to assertions that such cases have been too rare, Carl Shapiro, chief economist at DOJ from 2009-2011, recently wrote the following: “the Antitrust Division was genuinely interested in developing meritorious Section 2 cases, and we were prepared to devote the resources necessary to investigate complaints and other leads, but we found precious few cases that warranted an enforcement action based on the facts and the case law.”

**5. Proposed “Big Tech” Reforms Likely Would Harm, Not Help, Competition**

Application of sound competition policy must adequately deal with the risk of both false negatives (permitting conduct that harms competition) and false positives (prohibiting conduct that benefits competition). Although various commentators appear worried that the current balance falls too much in favor of false negatives, as we discuss in the next section, there is little

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44. *2010 Horizontal Merger Guidelines*, § 5.3 (“Mergers resulting in highly concentrated markets that involve an increase in the HHI of between 100 points and 200 points potentially raise significant competitive concerns and often warrant scrutiny.”)


empirical support for this conclusion. However, these commentators’ proposed solutions, including bright-line rules that would directly target specific kinds of firms, carry the strong possibility of harming competition and consumers by inhibiting procompetitive conduct.

In certain industries, organizational structures that take advantage of size may be able to operate more efficiently than smaller firms through the realization of economies of scale and scope.\(^{49}\) In such circumstances, it is often necessary to balance the benefits of such efficiencies against potential direct harms to consumers related to reductions in the strength or number of competitors. To address such situations, antitrust enforcement agencies continually develop flexible analytical tools and frameworks that can be adapted to assess these offsetting effects in any industry. As we discuss in more detail above, these existing analytical tools and frameworks are well-suited to address any antitrust concerns about large technology companies.

### A. Proposals for “Big Tech” Reforms often Abandon Economic Analysis

As described in more detail above, commentators have suggested several divergent ways to address the purported problems created by digital platform markets. Some argue for a complete prohibition on vertical integration through either entry or acquisition and a splitting up of current platforms.\(^{50}\) Others propose a strict nondiscrimination regime when it comes to, for example, access by independent merchants to the e-commerce platforms or the ordering of Internet content providers in search results, potentially to be combined with a regulatory structure to enforce non-discrimination rules that would have the goal of preventing a platform from disadvantaging services that compete with the platform’s own integrated services.\(^{51}\) For example, Hal Singer writes:

> [T]he most compelling [remedy for these concerns] is to subject Google—along with Amazon and Facebook—to a non-discrimination standard, enforced by an independent tribunal (the “Net Tribunal”). Patterned off the program-carriage protections created by

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\(^{49}\) Scott Morton et al., pp. 49-50.

\(^{50}\) See, e.g., Jonathan Taplin (2017), Move Fast and Break Things: How Facebook, Google, and Amazon Cornered Culture and Undermined Democracy, Little, Brown and Company.

Congress in the 1992 Cable Act, independent websites or app providers would have a new forum in which to lodge discrimination complaints against online platforms.\(^5\)

A common feature of these proposals is that, in many cases, they would establish bright-line rules that negate the need to analyze whether the conduct has or is likely to reduce competition. To adopt such an approach would constitute a fundamental departure from standard economic analysis of competition issues. Indeed, this approach effectively would eliminate rigorous economic analysis from the process by which the conduct of dominant firms in the technology industry is evaluated. Such lack of any analysis of the conduct at issue to support fundamental changes in antitrust policy is also inconsistent with the DOJ’s and FTC’s long-standing practice of using economics to guide its antitrust analysis.\(^5\) Moreover, such a panel would be superfluous to the FTC and DOJ, which already have channels through which such complaints can be lodged.\(^5\)

This type of approach would harm innovation incentives by deterring procompetitive conduct by companies wary of running afoul of a “tribunal,” including associated high litigation costs. Without economic analysis as part of a carefully balanced Section 2 standard, which, as discussed above, provides well-established, clear and applicable guidelines for anticompetitive conduct, certain platforms would have to deal with unpredictable and amorphous standards divorced from economic analysis. Conduct that is deemed to be “discriminatory” and harming competitors, but has vast consumer benefits, potentially could be actionable by such a “tribunal.” For example, such a standard would theoretically require platforms to separate functions that have substantial efficiencies when integrated—such as local search and navigation, or shopping and delivery.

In effect, the tribunal would protect competitors affected by changes to the platform, but without any quantification of the effect on consumers themselves—the real object of antitrust policy. Platforms would be wary of making procompetitive investments and product improvements in such an environment, including new popular entrants that may find themselves subject to sham petitioning-style complaints from incumbents. Such a tribunal would also be prone to rent-seeking by firms seeking to use the regulatory process as a substitute for competition, and would hinder the very sort of competitive entry that benefits consumers.

**B. Bright-Line Rules Targeting the Actions of Specific Types of Firms Likely Would Harm Consumer Welfare**

Bright-line rules are, by definition, rigid and thus carry with them the risk of prohibiting conduct and firm organizations that would lead to greater competition and benefits to consumers. Such


\(^{53}\) The FTC’s website states, “The Bureau of Economics (BE) has a proud tradition of providing scientifically sound, data-driven economic analysis that informs antitrust, consumer protection, and business regulation policy in the US.” See https://www.ftc.gov/about-ftc/bureaus-offices/bureau-economics.

rules are contrary to the modern thrust of competition policy, which carefully analyzes benefits and harms in an industry-specific, economically informed way. Moreover, as described in the prior section, current antitrust statutes and enforcement practices are flexible enough to prevent welfare-decreasing behavior while promoting welfare-enhancing behavior. The antitrust agencies actively investigate both mergers and single-firm conduct, and, where they deem the facts and law to warrant it, challenge such conduct. The antitrust agencies have not shied away from numerous investigations of tech platforms, demonstrating that the traditional consumer welfare tools are more than adequate for the task.

Rules targeting specific types of firms (e.g., large tech platforms) would be particularly harmful because they would unnecessarily favor certain types of business organizations (e.g., firms that stick to narrow lines of business) without evidence that supports such a policy. Given strong evidence that combinations of adjacent businesses can lead to valuable innovations, policies that inhibit such organizational structures carry a significant risk of raising industry costs and lowering innovation and quality.

As described above, products like Google Maps, Apple TV, and the leading smart speakers on the market likely would not exist in the face of certain commentators’ proposed bright-line restrictions. Further, many innovative and procompetitive integrations, such as Netflix Originals, Uber Eats, Costco’s online sales of Kirkland products, and the XBox One Minecraft Edition, may also be impermissible under these proposals.

Rules that inhibit acquisitions by large firms also would change incentives driving start-ups. Many tech startups “cash out” by eventually being acquired by and integrated into larger tech platforms. This path creates incentives for entrepreneurs to invest time and resources in the start-up in the first place. Although acquisition is not the only funding path for startups, policies that reduce the value of new innovations by reducing the ability to combine with other technologies could have the effect of inhibiting entry and innovation by start-ups.55

Targeting entry or mergers because the participating firms can be characterized as “large” and/or as “platforms” must deal with the fact that the benefits of entry or mergers often grow with firm size and may grow faster than any harms. Acquisition by a large firm, or even a platform, of a smaller firm operating in an adjacent market may pose no direct concerns to competition but may lead to great efficiencies in the form of integration with other products, enhanced distribution, and improved product quality. More generally, bundling that may occur after a firm enters another market often can create consumer benefits.56

C. Non-discrimination provisions may allocate scarce real estate (whether in a store or online) inefficiently

Proposals that would limit, or eliminate entirely, platforms’ decision about how to position their own products relative to other products amount to a form of a regulatory non-discrimination provision. It is well-understood by economists that such provisions can result in inefficient


allocation of scarce real-estate (e.g., on search results pages or physical store shelves) and conversely, that price-based mechanisms to allocate such space may have significant benefits. Competition over scarce shelf space is itself valuable to consumers. Of course, companies that provide search results in response to, for example, a product query are in the business of search discrimination: Search results must be ranked and sorted, meaning that some results are placed higher than others.

Physical retailers offer a useful analogy. For example, no restrictions are placed on retailers like Wal-Mart, CVS, Costco or Kroger to choose which products to stock or promote, including their own. Grocery stores are similarly free to prominently display their own-brand products over third-party products without interference from competition law. This is true despite the fact that such retailers may frequently be “dominant” in particular local markets.

In grocery stores and other retail locations, private-label products are often priced lower than competing brands, yet the other brands survive. For example, CVS-brand ibuprofen is both cheaper and bio-equivalent to name-brand Advil, yet CVS continues to stock Advil and consumers continue to buy it. This is because consumer preferences are diverse, so no one brand is going to capture the entirety of consumer preferences. Indeed, it may very well be that the variety of products itself drives diverse consumer preferences.

We see no basis for competition practice to treat online platforms differently, especially given that it is even easier for consumers to switch between online platforms than it would be to switch between physical stores. A successful search engine, e-commerce platform, or app store is built

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59 David Besanko, David Dranove, Mark Shanley & Scott Schaefer (2012), Economics of Strategy, Wiley, Sixth Edition, pp. 323-324. (“Nearly every industry can be broken down into smaller pieces known as segments… Differences among segments arise because of differences in customer economics (e.g., differences in willingness-to-pay or differences in willingness to trade off quality for price), supply conditions (e.g., costs of producing different product varieties), and segment size.”).

60 See, e.g., John M. Yun (2018), “Understanding Google’s Search Platform and the Implications for Antitrust Analyses,” Journal of Competition Law & Economics, 14:311-29, p. 318 (“… Google and a specialized search engine can overlap in some content areas but not in others – with even lower switching costs than stores in the same shopping mall.”). See also Aaron S. Edlin & Robert G. Harris (2013), “The Role of Switching Costs in Antitrust Analysis: A Comparison of Microsoft and Google,” Yale Journal of Law and Technology, 15:169-213, p. 206 (“But while those independent stores have reduced shopping costs as much as possible by locating so closely together, there are still significant shopping costs and transactions costs (e.g., waiting in line for service and/or to check out at each store visited). Contrast the brick-and-mortar case to the virtual world of vertical search: a user can easily set up bookmarks for a host of vertical sites such as
on catering to the diversity of consumer preferences. Digital platforms, much like their brick-and-mortar counterparts, seek to appeal to as wide a spectrum of consumer preferences as possible. If digital platforms made it too difficult to find alternatives or otherwise reduce their appeal to users, consumers have alternative options to locate the products and services they desire, including switching or adding new preferred hardware products.\textsuperscript{61} The platform itself would lose out in the end. Although these companies can earn some revenue by promoting their own-brand products, their real value is as a platform. Consequently, their incentives with regards to own-brand products and services are also not to destroy the core value of their platforms at the same time.\textsuperscript{62}

Although such proposals appear to be solutions in search of a problem, they certainly would cause harm to innovative product offerings that consumers use and benefit from every day. As noted above, consumers may no longer receive a map as an immediate answer to a search query, find originally created video content by video-streaming services, be able to purchase gaming consoles with certain games bundled, find useful and popular apps preloaded on their devices, and more.

A core question for evaluating such policies, and especially the extent to which they benefit or harm competition as opposed to competitors, is the extent to which rival products can successfully find alternative distribution channels. Foreclosure claims inherently raise case-specific issues that must be evaluated to balance potential harms and benefits. Although platforms can be an important distribution channel, many companies have developed strategies to maximize attention from all channels, not just platforms. Companies often enjoy, and indeed boast, of successful user growth and distribution channels even as they seek regulatory assistance. For example, Yelp’s complaints to regulators contrast with its claims to its investors. Yelp frequently touts the success of its mobile app to investors, which avoids the use of search platforms as an entry point entirely.\textsuperscript{63} Indeed, Yelp specifically promotes its multiple distribution product review and purchasing (Amazon and eBay), travel reviews (TripAdvisor), travel price comparisons and/or booking (Priceline, Kayak, Expedia), news (New York Times, Flipboard, Pulse), and as many more as the user chooses. The cost of identifying these sites is near zero, as is the cost of switching from one to another.

\textsuperscript{61} See, e.g., Apple Q1 2017 earnings call, statement of Tim Cook touting “switchers” from Android: “And if you look at the switcher number, it's the highest that we've seen in any quarter.”

\textsuperscript{62} For an analysis of the tradeoffs involved in Google’s decision to introduce Universal Search in 2007, see John M. Yun (2018), “Understanding Google’s Search Platform and the Implications for Antitrust Analyses,” Journal of Competition Law & Economics 14:311-329, pp. 323-324 (“If Google implements a quality increase in its search results, then it is profit maximizing to the extent that the positive effect from more users offsets the drop in profits from lower ad click-through rates and, ultimately, advertiser participation. Similarly, if quality decreases, then it is profit maximizing to implement the change only if the decrease in user participation is offset by the value of higher ad click-through rates and advertiser participation.”)

\textsuperscript{63} Yelp Form 10-Q, Q3 2018, available at https://www.sec.gov/Archives/edgar/data/1345016/000162828018014150/yelp10-qq3x18.htm (“We anticipate that our mobile traffic will be the driver of our growth for the foreseeable future and that traffic to our desktop website will fluctuate and generally decline as we focus on driving traffic to our mobile app, where we have our most engaged users and which reduces our reliance on Google and other search engines”); Yelp Shareholder Letter, Q1 2018, available at
channels such as via smart speaker skills, connected car preloads, distribution deals with phone makers and carriers, and more.64

D. Structurally separating platforms would amount to codifying double marginalization and pricing inefficiencies

Many mergers involving complements or firms in vertical relationships with one another (i.e., operating at different levels of the production chain) generate substantial efficiencies.65 Such efficiencies frequently take the form of elimination of double marginalization. Double marginalization arises when two complementary products both have positive margins. When operating as an integrated unit, the firm has the incentive to “internalize” both margins and thus to charge a lower price than would two firms operating separately. Indeed, such efficiencies are likely to be greatest in precisely those instances in which we might be most concerned about harm from a vertical merger.66

Policies that would separate platforms would codify double marginalization and other pricing inefficiencies by preventing vertical integration. Although, in some cases, the risk of competitive harm may outweigh the benefits of the elimination of such inefficiencies, reaching such a conclusion inherently requires a case-specific analysis, which is best addressed through existing antitrust enforcement mechanisms.

Separating platforms would go in the opposite direction: eliminating much pro-competitive, consumer-surplus-increasing internalization of double marginalization, and deterring other companies’ moves to grow in such a fashion as to reap the benefits of internalizing double


65 Economic research on this topic extends back to Coase (1937).

66 James C. Cooper, Luke M. Froeb, Dan O’Brien, & Michael G. Vita (2005), “Vertical antitrust policy as a problem of inference,” International Journal of Industrial Organization, 23(7-8):639-664, p. 658 (“Most models that predict (potential) harm from vertical restraints require pre-existing market power at multiple stages of production. This condition usually implies the existence of efficiencies from vertical control, and the magnitude of the efficiency often rises monotonically with the level of pre-existing market power.”)
marginalization. In particular, double marginalization is especially relevant to single platforms. By internalizing costs of different parts to the platform—for example, by integrating a free ad serving solution with paid components elsewhere in the advertising stack—a technology company is often able to charge a very low or zero price to the consumer for the entire platform itself. Such practices can generate substantial consumer surplus. In addition, there is value in consumers having access to a full suite of services from a single platform, whether it is from Google, Apple, Facebook, or other tech companies. If services were separated due to a structural separation policy, that would likely lead to much higher switching and transaction costs that would decrease consumer welfare. Integrated and seamless services have a high value to consumers.

Double marginalization is an important factor for why the agency model for the sale of digital goods may be superior the wholesale model: “It is well known that if both the firm and the platform are risk neutral and maximize their individual profits, double marginalization will prevail under a wholesale contract, which leads to channel inefficiency. In the agency bundle model, however, the firm and platform are ‘virtually’ vertically integrated, where the friction between the parties is resolved through the alignment of interest.” See Xianjun Geng, Yinliang (Ricky) Tan & Lai Wei (2018), “How Add-on Pricing Interacts with Distribution Contracts,” Production and Operations Management, 27:605-23, pp. 614-15. See also Yinliang Tan, Janice E. Carrillo & Hsing Kenny Cheng (2016), “The Agency Model for Digital Goods,” Decision Sciences, 47:628-60, p. 640 (“The decentralized digital goods supply chain achieves ‘virtual integration’ with the agency model when the publisher decides the price. Essentially, the publisher makes all of the supply chain decisions in the agency model and shares the revenue with the retailers whereas in the wholesale model, the publisher and the retailers share the pricing decisions, which cause the double marginalization effect.”) Also see Yinliang (Ricky) Tan & Janice E. Carrillo (2017), “Strategic Analysis of the Agency Model for Digital Goods,” Production and Operations Management, 26:724-41, p. 726 (“In the early stages of the e-book market when many consumers still favored the printed book, both the publisher and retailers were better off under the agency model compared with the wholesale model. The intuition driving this result is that the agency model utilizes a revenue-sharing scheme with upstream publisher’s control over the price for sales of the digital goods which mitigates the double marginalization effect.”)


Robert Crandall argues that, to the extent that Google, Amazon, and Facebook have grown to their present size due to network effects in Internet search, online shopping, and social media, respectively, “it is far from clear how breaking up these companies into multiple companies
Digital advertising, a large and growing market, has benefited immensely from the elimination of double marginalization as well. Google, Facebook, Verizon’s Oath,70 Adobe,71 and other companies offer a vertically integrated service for digital advertising (sometimes called a “stack”). The ad stacks have been built by a combination of acquisitions and internal product development. A stack simplifies the advertising process and makes digital advertising very cheap and accessible to advertisers, maximizing return on investment. Digital advertising also has lower entry costs than other forms of advertising. Disaggregating the stack would increase costs for advertisers (i.e., the companies that advertise their products and services online) and make advertising less effective, because it would be more difficult and expensive to target likely customers.

Platform separations also prevent significant synergies from being realized, which are often key rationales for acquisitions or internal product innovation. Assessment of synergies has a recognized and important place in antitrust enforcement. Those synergies can be passed down to consumers in the form of lower prices, higher quality, product innovation or other consumer benefits. For example, Facebook brought an ad-supported business model to Instagram. Without it, Instagram might not have been able to grow.

6. PROPOSED REFORMS LACK A SOUND EMPIRICAL FOUNDATION

Efficacious exercise of sound competition policy requires fact-intensive and context-specific analysis.

The lack of any such sound empirical foundation underlying some of the proposals described above is striking. For example, conclusions that antitrust enforcement must be fundamentally overhauled because concentration has increased in the United States typically rely on aggregate measures of concentration that are not sufficiently refined to reach conclusions about the state of competition in well-defined antitrust markets.72 Reliance on such data to reach broad policy conclusions is problematic because it risks confusing procompetitive and anticompetitive effects. For example, increase in the national share of large firms in an industry characterized by local competition (e.g., supermarkets) may reflect the realization of procompetitive economies of scale rather than a reduction in competition in any local market. Antitrust economics recognizes that fewer, larger firms engaging in competition against each other is not necessarily harmful to consumer welfare, particularly where such firms benefit from substantial efficiencies in the form of economies of scale or scope. Consumer welfare, or the level of competition, does not depend


72 See generally, Shapiro (2018), § 3.
solely on the number of competitors, and healthy competition can exist between even a small number of large firms.

Some of the proposed reforms also favor certain business strategies and forms of firm organization that target or have the effect of targeting specific companies. For example, Senator Elizabeth Warren proposes designating platforms with more than $25 billion in revenue as utilities and subjecting them to a higher degree of regulation. Companies with revenue between $90 million and $25 billion will be subject to a lower degree of regulation. But there is nothing in antitrust or economic literature that recognizes the $25 billion and $90 million lines as particularly meaningful. Proposals that establish revenue thresholds create meaningful incentives to evade such thresholds using taxes, affiliated companies, and other mechanisms that do not provide any public benefit.

Harold Feld calls for robust nondiscrimination provisions, including “prohibitions on favoring goods or services based on ownership or payment” and “an ability for the enforcing agency and private parties to test algorithms for prohibited bias through a ‘black box’ process that shields the code from repeated testing designed to reverse-engineer the algorithm.” Feld’s black box process calls for oversight by an agency like National Institute of Standards and Technology (NIST), meaning that bona fide improvements and innovations to search engines, app stores, e-commerce platforms, video and gaming platforms, and more could be tied up in months or years of proceedings without any clear consumer benefit. Significantly, he does not provide any economic theory or data that supports his analysis.

Similarly, in a 2016 article in the *Yale Law Journal*, Lina Khan proposes, among other things, to “place prophylactic limits on vertical integration by platforms that have reached a certain level of dominance” and to apply common carrier obligations and duties without any evidence that any of the target’s actions have harmed consumers. Similar to the other proposals above, Khan does not articulate a rationale for establishing lines between which platforms should receive the “prophylactic limits” and “common carrier” obligations and which should not.

Notably, Khan essentially concedes that at least some platforms provide enormous consumer benefits and harm to competition cannot be found using price and output. Consequently, it seems that Khan essentially concedes that consumer harm cannot easily be found using conventional, measurable antitrust tools, and instead relies solely on much more amorphous, generalized societal harms (e.g., “safety and soundness, and excessive economic and political power”) that are both too vague to assess in a meaningful way and completely out of place in antitrust analysis. The antitrust agencies are not equipped to make such an assessment. Indeed, Khan’s suggested harms do not seem specific or particular to technology platforms at all but instead could apply to essentially any large corporation in any sector of the economy.

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74 Id. at p. 113.
75 *Khan (2016)*, § VI.
Some legislation proposes amending the Clayton Act to create a presumption that acquisitions by firms above a certain size (e.g., $100 billion) are anticompetitive. But such proposals are not based on any known empirical evidence that acquisitions by companies with a market capitalization of $100 billion are more likely to be anticompetitive, or that there is something intrinsic to acquisitions by large companies that make them more anticompetitive. Indeed, one could equally conclude that large companies might be better placed to realize procompetitive efficiencies and economies of scale from acquisitions. The antitrust agencies are more than capable of thoroughly analyzing the likely competitive effects of a merger without heavy-handed guidance from Congress.

Poorly supported assertions that large firms must necessarily be causing anticompetitive harm, such that conventional antitrust tools are insufficient and must be replaced with bright-line rules, are not new or confined to the tech sector. For example, in July 2006, Barry C. Lynn published “Breaking the Chain: The antitrust case against Walmart” in Harper’s Magazine, writing:

> For a generation, big firms have enjoyed almost a complete license to use brute economic force to grow only bigger. And so today we find ourselves in a world dominated by immense global oligopolies that every day further limit the flexibility of our economy and our personal freedom within it. . . .

> If, however, we choose the path of the free market, and of individual freedom within the market; if we choose to ensure the health and flexibility of our economy and our industrial systems and our society; if we choose to protect our republican way of government, which depends on the separation of powers within our economy just as our political system–then we have only one choice. We must restore antitrust law to its central role in protecting the economic rights, properties, and liberties of the American citizen, and first use that power to break Wal-Mart into pieces.

However, more rigorous analyses have found Lynn’s assertions to be misguided. For example, around the same time, economist Jerry Hausman wrote an academic paper (with Ephraim Leibtag) showing that Walmart’s market share growth greatly increased consumer welfare, while policies that prevented Walmart from entering certain geographies had caused significant decreases in consumer welfare. Ironically, Lynn’s current commentary largely ignores Walmart because entry by the very digital platforms he now decries brought significant

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78 In 2017, Senator Klobuchar introduced legislation that would amend the Clayton Act to create a presumption that acquisitions by firms above a certain size are anticompetitive. See Consolidation Prevention and Competition Promotion Act of 2017, S. 1812, 115th Congress (hereinafter S. 1812.) This legislation would have the effect of shifting the burden on “extremely large” firms wishing to acquire another firm such that they would “bear the burden of establishing that the acquisition will not materially harm competition.” (S. 1812, p. 5) A firm is defined as being very large if it has “assets, net annual sales, or a market capitalization greater than $100,000,000,000.”

79 Jerry Hausman & Ephraim Leibtag (2007), “Consumer Benefits from Increased Competition in Shopping Outlets: Measuring the Effect of Wal-Mart,” *Journal of Applied Econometrics*, 22(7):1157-1177 (noting, for example, that: “Getting a 3.75 percent improvement in consumer welfare is greater than any tax reform or other policies. And while Wal-Mart pays its employees less — which does affect local wages — you still can’t beat that 3.75 percent. If economists could improve consumer welfare by that much, we’d all be heroes.”)
competition to retail, making clear that the break-ups he called for a decade ago were unnecessary. Likewise, his calls for break-ups now should be viewed with skepticism.

Bright-line rules, as advocated for by various critics of tech platforms, assume that because a platform is powerful in the present day, it will continue to be equally or more powerful in the future, so aggressive action outside conventional antitrust enforcement is needed. It is risky to assume a present “monopoly” will remain a monopoly in the future. For example, BlackBerry and HP/Palm controlled most of the market for smartphones until Apple introduced the iPhone and reduced their shares to close to zero within three years. Companies like Google and Facebook unseated entrenched successful companies with vastly larger user bases. Slack has gained significant entry in enterprise communications despite Microsoft’s long-standing incumbency in the space. Slack is currently valued at more than $7 billion and has eight million active users.\(^{80}\) All of these changes occurred without the sort of structural antitrust enforcement that some advocates want today.

7. CONCLUSION

Antitrust policy has benefited from the application of rigorous, case-specific economic tools that allow enforcers to target anticompetitive behavior while leaving procompetitive behavior untouched. In particular, such tools recognize that protecting competition—not competitors—is central to the goal of improving consumer welfare, and that entry and innovation, including by companies that are allegedly “dominant” in adjacent markets, is typically procompetitive and should be protected.

These core principles remain fully applicable in modern, technology-driven industries. We applaud the DOJ’s and FTC’s success in using rigorous economic methods to further its mission of protecting innovation and consumers.

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ANTITRUST GUIDELINES FOR THE PLATFORM ECONOMY IN THE ERA OF ENHANCED ANTITRUST SCRUTINY

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On February 7, 2021, the Anti-Monopoly Commission of the State Council of China promulgated the world’s first antitrust guidelines especially focused on the platform economy – the Antitrust Guidelines for the Platform Economy (hereinafter as the “Platform Guidelines”), which took less than 70 days after the end of the consultation period. While previous antitrust guidelines usually took years to be officially promulgated, the Platform Guidelines set the record for taking the shortest time. This shows China’s determination to intensify antitrust scrutiny on the platform economy.

The Platform Guidelines clarify the antitrust rules for the platform economy, taking thorough account of industry-specific features, aiming to provide clear guidance and useful reference for law enforcers in tackling antitrust challenges in this field. In light of the this, this article navigates the Platform Guidelines with a focus on the highlights and their impact on the antitrust practices in the platform economy.

Specifically, this article has six parts: the first part interprets the goals of the Platform Guidelines; the second to fifth parts introduces the highlights and practical impacts of the Platform Guidelines concerning relevant market, the monopoly agreements, the abuse of market dominance, and the concentration of undertakings respectively; and the sixth part sets out conclusions.

I. INTERPRETATION OF THE GOALS OF THE PLATFORM GUIDELINES: FROM “INCLUSIVE AND PRUDENT” TO “DISCIPLINED, ORDERLY, INNOVATIVE AND HEALTHY”

While reiterating the legislative goals of the Anti-Monopoly Law (“AML”), Article 1 of the Platform Guidelines add “promoting the disciplined, orderly, innovative and healthy development of platform economy” as one of the goals. This reflects China’s change in attitude towards antitrust scrutiny over platform economy from “inclusive and prudent” to “disciplined, orderly, innovative and healthy.”

In recent years, China’s platform economy has developed rapidly. It has gradually developed from an uncertain infancy to a relatively mature youth, giving birth to some leading platform companies comparable to Facebook and Amazon. However, the conducts like “Choose One from Two,” “Big Data Discrimination,” and “Killer Acquisitions” engaged by some leading platform companies have caught more and more attention from both the general public and the regulators, and the competition harm produced by these conducts are becoming clearer. Therefore, there exists a wide consensus that disorderly expansion and growth are neither sustainable nor healthy, and proper regulations and guidance need to be put in place. At the same time, the policy makers and regulators in China are obtaining more knowledge of the platform economy over the time, and its ability to tackle antitrust issues in this field has also been further improved.

Especially since 2020, the Chinese government has emphasized that “the market plays a decisive role in resource allocation” and positioned the development strategy at “expanding domestic demand” and “accelerating domestic economy cycle.” This further urges a change in regulatory approach in the platform economy to ensure the proper functioning of the market in the domestic platform economy industry. Therefore, the Platform Guidelines promulgated at this time to strengthen the antitrust scrutiny over the platform economy are particularly crucial and provide a timely response to the regulatory need.

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II. HIGHLIGHTS OF THE PLATFORM GUIDELINES CONCERNING MARKET DEFINITION AND THEIR PRACTICAL IMPACT

A. The Platform Guidelines Delete the Provision in the Draft for Comments that Relevant Market May Not Be Defined in Certain Antitrust Cases

The Draft for Comments have explicitly set out that in certain cases relevant market may not be accurately defined. These include: (1) the horizontal monopoly agreement cases that contain hard-core restrictions; (2) the vertical monopoly agreement cases in which resale price is maintained; (3) certain abuse of market dominance cases, where the direct factual evidence is sufficient, the conduct that can be carried out only on the basis of market dominance has lasted for a long time with obvious harmful effects, and there is insufficient conditions or it is very difficult to accurately define the relevant market.

The Platform Guidelines as officially promulgated delete the aforementioned provisions in the Draft for Comments, and instead it emphasizes that “investigations over monopoly agreements, abuse of market dominance, and merger review in the field of the platform economy usually need to define the relevant market.”

With regard to the practical impact of the above stipulation, it should be interpreted together with the principle for deciding the role of relevant market. As clarified by the Platform Guidelines, the role of relevant market definition should “adhere to the principle of case-by-case analysis, and different types of antitrust cases requires differently in terms of relevant market definition.” Therefore, the above stipulation does not mean that defining the relevant market would be required in each and every case. At the same time, such stipulation puts forward higher requirements on antitrust enforcement activities in the platform economy, especially the law enforcement activities related to monopoly agreements in the platform economy.

B. The Platform Guidelines List Factors to Be Considered For Substitution Analysis When Defining The Relevant Market In The Platform Economy

In terms of demand-side substitute analysis, the Platform Guidelines state that when conducting demand-side substitution analysis in the field of platform economy, factors such as platform functions, business models, application scenarios, user groups, multilateral markets, and offline transactions can be considered.

In terms of supply-side substitution analysis, the Platform Guidelines provide that when conducting supply-side substitute analysis in the field of platform economy, factors such as “market entry, technical barriers, network effects, lock-in effects, transfer costs, cross-boundary competition, and etc.” can be considered.

It can be seen that the Platform Guidelines list the factors that need to be considered in the substitute analysis in the platform economy particularly taking into account the characteristics of such economy, which will provide more targeted guidance for defining the relevant market in the platform economy.

C. The Platform Guidelines Further Specify the Approach to Define the Relevant Product Market in Platform Economy in Light of The Characteristics Of The Platform Economy

The Platform Guidelines list three approaches to define the relevant product market in platform economy. Specifically, (1) define the relevant product market based on the product on one side of the platform; (2) define each relevant product market respectively according to the products on each side of the platform and consider the relationship among and their impact on each other; or (3) define the relevant product market by regarding the platform as a whole when the cross-platforms network effects of the platform can impose sufficient competitive constraints on the platform undertaking.

The three approaches specified by the Platform Guidelines have provided a more specific guideline to the identification of the relevant market for platforms. This stipulation has borrowed some ideas from the antitrust practices in other jurisdictions. In particular, the third approach reflects the mainstream international views. For example, in Rethinking Antitrust Tools for Multi-Sided Platforms 2018, the OECD states that “[i]n two-sided non-transaction markets, one should define two (interrelated) markets; [i]n two-sided transaction markets, one should define only one
market." In addition, in *Ohio v. American Express Co.*, the Supreme Court of the United States finds the credit card networks as “two-sided transaction platform,” and thus defines a single market that combines the card companies’ merchant-related services and shopper-related services.

In this regard, in tackling antitrust cases involving the platform economy, China’s antitrust agencies will likely fully consider the features of the platform concerned, and may borrow experiences from other regimes, to decide which one of the three approaches to take in individual cases.

### III. HIGHLIGHTS OF THE PLATFORM GUIDELINES CONCERNING THE MONOPOLY AGREEMENTS AND THE PRACTICAL IMPACT

#### A. For the First Time, the Platform Guidelines Clearly Discuss Data and Algorithmic Collusion in the Platform Economy

In the platform economy, a growing number of firms are collecting and processing large amounts of data and deliberately influencing user behaviors on the platform by engaging algorithms. While few would dispute the benefits brought by the use of data and algorithms, there is a widespread concern over the possible anti-competitive effects posed by them “as they can make it easier for firms to achieve collusion without any formal agreement or physical interactions.” Therefore, algorithmic collusion is becoming an emerging hotspot globally.

The Platform Guidelines address the issue of data and algorithmic collusion and clearly shows China’s regulatory approach. In particular:

- Article 5 of the Platform Guidelines sets out a general provision on data and algorithmic collusion, i.e., other concerted practices may be reached through data, algorithms, platform rules or other means.

- Article 6 of the Platform Guidelines illustrates the form of data and algorithmic collusion from the perspective of horizontal monopoly agreement. That is, competing undertakings in the platform economy may use data, algorithms, and platform rules to achieve coordinated practices and to reach horizontal monopoly agreements.

- Article 7 of the Platform Guidelines illustrates the form of data and algorithmic collusion from the perspective of vertical monopoly agreement. That is, undertakings may use platform rules to align prices; use data and algorithms to directly or indirectly maintain prices; or use technical means, platform rules, data and algorithms to restrict trading conditions to exclude or restrict market competition.

- Article 8 of the Platform Guidelines further illustrates the form of data and algorithmic collusion from the perspective of hub-and-spoke agreement. That is, platform undertakings may also use technical means, platform rules, data and algorithms to organize, coordinate, or assist competing undertakings to reach a hub-and-spoke agreement having the effect of a horizontal monopoly agreement.

As noted above, China takes a fairly comprehensive regulatory approach, covering all types of monopoly agreements. Relevant undertakings in the platform economy may need to develop and carry out an in-depth and thorough antitrust risk screening on the use of data, algorithm and other technical means. Such antitrust risk screening may need to cover not only the antitrust risks of potentially coordinating with competitors, but also the risk of fixing or restricting transaction counterparties’ resale price, and the risk of facilitating transaction counterparties who compete with each other to reach a horizontal agreement.

#### B. The Platform Guidelines Specify the Way to Define and Prove “Other Concerted Practices” in the Platform economy

1. The Platform Guidelines clarify the meaning of “other concerted practices” in platform economy

Pursuant to Article 5 of the Platform Guidelines, “other concerted practices” refer to the undertakings’ substantially coordinated and consistent conducts achieved via data, algorithms, platform rules or other means without reaching an explicit agreement or decision. Meanwhile, Article 5 also exempts price following and other parallel conduct by the relevant undertakings based on their independent will. Article 9 further states that if the concerted practice is established by indirect evidence, the factors to be considered include the level of undertakings’ knowledge to the relevant information.

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As can be seen from the provisions above, the Platform Guidelines require a meeting of minds and information exchanges as essential elements to establish concerted practices, though this requirement is not explicitly stated in the Platform Guidelines.

2. The Platform Guidelines set out the standard of establishing other concerted practice by indirect evidence

Other concerted practices in the platform economy may be carried out in more covert manners, including through data, algorithms, platform rules, etc. To address such an issue, Article 9 of the Platform Guidelines states that in addition to direct evidence, antitrust agencies can also prove the existence of other concerted practices by indirect evidence with logical consistency in accordance with Article 6 of the Interim Provisions on Prohibition of Monopoly Agreements.

The question of how to interpret and apply the so-called “indirect evidence with logical consistency” remains open under the Platform Guidelines. Under Article 6 of the Interim Provisions on Prohibition of Monopoly Agreements, such indirect evidence seems to be required to have four elements including (1) the uniformity of the undertakings’ conducts; (2) the meeting of minds and information exchanges of the undertakings; (3) the undertakings’ justification for their uniformity of conducts; and (4) the market structure, competition status, market changes. And therefore, logical consistency may mean that after considering all these four elements, all facts proven by the indirect evidence are still consistent in logic and all indicate the existence of collusion.

C. The Platform Guidelines Address the Issue of Hub-And-Spoke Agreement

Hub-and-spoke agreement has always been a hot and complicated issue in antitrust law enforcement in China. For example, in the Draft for the Revised Anti-Monopoly Law (Draft for Public Comments), a new provision has been added to prohibit hub-and-spoke agreement. Similarly, the Platform Guidelines also add a new article to emphasize the prohibition of hub-and-spoke agreement.

Viewing from the phrasing of the Platform Guidelines, antitrust law enforcement agencies’ actions against hub-and-spoke agreements are still under the current framework of the AML, i.e. Article 13 (horizontal monopoly agreement) and Article 14 (vertical monopoly agreement). Specifically, antitrust law enforcement agencies may:

- Rely on Article 13 of the AML to investigate and impose penalties on the competing undertakings on the platforms that have reached horizontal monopoly agreements.
- Rely on Article 14 of the AML to investigate and impose penalties on undertakings on the platform which are not competitors with the parties of the agreements but have coordinated, organized or facilitated the monopoly agreements.
IV. HIGHLIGHTS OF THE PLATFORM GUIDELINES CONCERNING THE ABUSE OF MARKET DOMINANCE AND THEIR PRACTICAL IMPACT

A. The Platform Guidelines Specify the Attitude to Regulate the “Choose One from Two” Conduct

The problem of “Choose One from Two” has been a hotspot in China in recent years. Based on a preliminary research on the public available information, “Choose One from Two” has triggered at least 8 antitrust litigations and unfair competition administrative penalties in the platform economy since 2017. Among those cases, Chinese e-commerce giant Alibaba’s “Choose One from Two” conduct has undoubtedly attracted the most public attention and concern, whose legality is under review by both the court and the SAMR.

“Choose One from Two” conduct is explicitly dealt with under Article 15 Paragraph 1(1) of the Platform Guidelines, and the rest of Article 15 (restrictive dealing), as listed below, also applies to “Choose One from Two” practice. In particular:

- The Platform Guidelines specify the approaches to apply the notion of restrictive dealing in the platform economy. The Platform Guidelines state that restrictive dealing can be achieved through a written or verbal agreement, or through the setting of actual restrictions or obstacles through platform rules, data, algorithms, technical means, etc. This stipulation shows that the real concern is the impact on competition rather than the forms of conduct. As a result, even when no written or oral agreement has been reached, undertakings that have market dominance may still violate the AML as long as the “Choose One from Two” conduct has been actually implemented. The agencies’ focus on competitive impact rather than forms of conduct has been confirmed by a recent case. Specifically, in an administrative penalty decision against Vipshop’s unfair competition conduct, the SAMR has clearly found that the “Choose One from Two” conduct can take the form of restrictive dealing implemented by “using the technical measures provided by the suppliers’ platform system, intelligent networking engines, operating middle stations, etc.” Although this case is an anti-unfair competition case, it can still provide insights to the antitrust agencies’ approach to the forms of implementing the “Choose One from Two” conduct.

- The Platform Guidelines distinguish between the restrictive dealings by punitive measures and those by incentive measures, and suggest different regulatory approaches. The Platform Guidelines specifically point out that where a platform undertaking imposes exclusive restrictions by taking punitive measures, such practice will directly harm market competition and consumer interests, and thus shall generally be founded as restrictive dealing. Where such exclusive restriction is imposed by taking incentive measures, the Platform Guidelines state that such practice may have certain positive effects on the interests of the undertakings operating on the platform, consumer interests and the overall social welfare. However, such practice may also be found as restrictive dealing if there is evidence showing that it materially eliminates or restricts market competition. The above distinction is one of the main breakthroughs made by the Platform Guidelines in respect of restrictive dealing. This distinction suggests that the antitrust agencies in China tend to assess the competition effects of the practice at issue in deciding whether it constitutes an unlawful restrictive dealing and may take different analytical approaches according to the likelihood of anti-competitive effects.

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Administrative Penalty Decision of Guo Shi Jian Chu [2021] No.3.
Administrative Penalty Decision of Tong Shi Jian Guan Fa Zi [2019] No. 3037.
Administrative Penalty Decision of Jin Shi Jian Fa Zi [2017] No. 22.


12 Administrative Penalty Decision of Guo Shi Jian Chu [2021] No.3.
• The Platform Guidelines elaborate and specify the justifications for restrictive dealing in platform economy industry. Prior to the promulgation of the Platform Guidelines, valid justifications for restrictive dealing include: (1) necessary to meet the requirements of product safety; (2) necessary to protect intellectual property; (3) necessary to protect the specific investment made for the trading; and others. 

By factoring the characteristics of the platform economy, the Platform Guidelines further add a number of justifications for restrictive dealing in platform economy. These newly added justifications include: (1) necessary to protect the interests of counterparties and consumers; (2) necessary to protect trade secret and data security; and (3) necessary to maintain reasonable business model, etc. Noteworthily, an important element for all these justifications is “necessary.” This means that undertakings will bear a fairly heavy burden of proof and may be found as failing to establish the justifications if there are less restrictive ways to achieve the same goal. Therefore, relevant undertakings with market dominance shall try avoiding engaging in restrictive dealing practices. If such practices are inevitable, undertakings shall cautiously assess the possible competition effects of the practices and further evaluate whether the burden of proof for justifications can be fulfilled.

B. Refusal of Access — The Platform Guidelines Set Out Approaches to Refusals to Deal in the Platform Economy

In recent years, there are growing concerns on the refusal of access by certain key platforms, which has resulted in a number of antitrust litigations, including the high-profile antitrust litigation between two internet giants in China, i.e. ByteDance v. Tencent.14

The Platform Guidelines clearly deal with this issue in Article 14. In comparison with other laws and regulations, the Platform Guidelines set out the following noteworthy rules:

• The Platform Guidelines further specify the factors to be considered in finding essential facility in platform economy industry. Article 14(1) of the Platform Guidelines specify that “the undertakings controlling essential facility refuse to deal with counterparties on reasonable terms” is one form of refusal to deal, which clearly sets out the essential facility doctrine in platform economy. On basis of that, the Platform Guidelines further elaborate and specify the factors to be considered in finding essential facility in platform economy. Such factors include: the data owned by this platform, the substitutability of other platforms, and the existence of potentially available platforms, etc. This is also one of the major changes made by the Platform Guidelines in respect of essential facility doctrine. Notably, China is not the only jurisdiction which opts to impose transaction obligations on certain platform undertakings via essential facility doctrine. Other jurisdictions like United States are also considering this option. Therefore, it is foreseeable that in future antitrust enforcements in platform economy, the role of essential facility doctrine will be more important.

• The Platform Guidelines elaborate the justifications for refusal to deal in the platform economy industry. In addition to the justifications set out by other laws and regulations, the Platform Guidelines add a noteworthy justification for refusal to deal in platform economy, i.e. “the counterparties have expressly refused to or actually failed to comply with fair, reasonable and non-discriminatory platform rules.” This new justification somewhat reflects the rationale in previous court judgments. For instance, in Shenzhen Weiyuanma Software Development Co., Ltd. v. Tencent Technology (Shenzhen) Co., Ltd., the Shenzhen Intermediate People’s Court ruled that since the plaintiff had breached the Operation Specifications and Service Agreement agreed by both parties, it is proper for Tencent to suspend the account of the plaintiff according to the Operation Specifications and Service Agreement.15 This case was selected as one of the 10 Influential Cases of Internet Judiciary in China (Case 5) by the Supreme People’s Court (“SPC”),16 which reflects the endorsement of the SPC to such rationale to some extent.

C. Big Data Discrimination — The Platform Guidelines Clarify the Discriminatory Treatment Issue in Platform Economy

In addition to “Choose one From Two” and refusal of access issues, the big data discrimination issue has also come to the fore of the platform economy. Some platform undertakings have long been criticized for charging different consumers different prices for the same products/services based on the big data regarding consumer preference, consumption habits, consumers’ ability to pay, etc. To address this issue, the Platform Guidelines add the following special provisions:

13 Article 17 Paragraph 3 of the Interim Rules on Prohibition of Abuse of Market Dominance provides that valid justifications for restrictive dealing include: “(1) necessary to meet the requirements of product safety; (2) necessary to protect intellectual property; (3) necessary to protect the specific investment made for the trading; (4) other reasons that can justify the conduct.

14 Douyin WeChat Official Account, Statement Regarding the Antitrust Litigation Against Tencent, available at https://mp.weixin.qq.com/s/gP1oPRvJW6qD_dEGIKw3vQ.

15 Shenzhen Weiyuanma Software Development Co., Ltd. v. Tencent Technology (Shenzhen) Co., Ltd. and Shenzhen Tencent Computer System Co., Ltd., A Dispute over Abuse of Market Dominance, (2017) Yue 03 Min Chu No.250.

1. The Platform Guidelines clarify that big data discrimination may constitute discriminatory treatment under the AML

Article 17 of the Platform Guidelines sets out that “undertakings in platform economy with market dominance may, without justification, abuse their market dominance to apply differentiated treatment to counterparties with the same transaction conditions, thereby excluding or restricting market competition.” One of the factors listed in this article to assess whether an undertaking has engaged in discriminatory treatment is “by using big data and algorithms, applying differentiated transaction prices or other transaction conditions according to the payment capacity, consumption preference, use habits, and etc. of the counterparties.” This addresses the big data discrimination issue specifically.

2. The Platform Guidelines further clarify the standards for determining whether counterparties are with the same transaction conditions

In practice, one difficulty in compliance work in relation to discriminatory treatment is to evaluate whether relevant counterparties are with the same conditions or not. To facilitate the evaluation, the Platform Guidelines set out both a “positive list” and a “negative list” of factors to assess whether counterparties are with the “same conditions” or not. In particular:

- the positive list includes factors that will materially affect the transactions, such as transaction security, transaction cost, credit status, transaction stage, transaction duration, and etc.
- the negative list includes factors that will not materially affect the counterparties’ conditions, such as the privacy information, transaction history, individual preferences, consumption habits, and etc.

Therefore, in applying different transaction conditions or prices to different consumers, relevant undertakings in platform economy with market dominance shall cautiously assess whether the conditions of such consumers are the same or not in accordance with Article 17(2) of the Platform Guidelines.

V. HIGHLIGHTS OF THE PLATFORM GUIDELINES CONCERNING MERGER FILINGS AND THEIR PRACTICAL IMPACT

A. Notification of Transactions Involving VIE – the Platform Guidelines Specify the Scope of Transactions That Are Subject to Merger Review For the First Time

Since the legality of the VIE structure is not clear under Chinese laws and regulations, whether VIE-structured transactions must be notified to the competent authority used to be an unsettled issue. Therefore, there are a large number of transactions in China’s Internet industry that have not been notified. However, in 2020, the SAMR expressed its regulatory attitude towards the concentrations involving VIE structures by reviewing a VIE-structured transaction for the first time,17 as well as by imposing fines for the first time on gun-jumping of VIE-structured transactions.18

Except for the cases above, the Platform Guidelines for the first time specify in written rules that “[t]he VIE-structured concentration of undertakings may fall under the scope of concentration of undertakings subject to antitrust review.” This undoubtedly signals stricter law enforcement, and “VIE structure is not an excuse for Internet companies to escape from being monitored and regulated.”19

Therefore, undertakings in the field of platform economy shall ensure that they will file future transactions in accordance with the relevant laws and regulations. Meanwhile, they shall also revisit the completed transactions involving the VIE structure and find proper ways to cope with the violation of failure to file. In addition, considering that the imminent revision of the AML is likely to aggravate the penalties on failure to file, undertakings in the field of platform economy shall consider whether to take advantage of this time window before the promulgation of the amended AML to file the transaction with the antitrust agency.

17 Establishment of a new joint venture between Shanghai Mingcha Zhegang Management Consulting and Huansheng Information Technology (Shanghai).
B. Killer Acquisitions – the Platform Guidelines Clarify the Types of Concentration of Potential Concern

In recent years, “killer acquisitions” in Internet industry have been of concern. As pointed out by the of U.S. House Judiciary Report in October 2020, tech giants might neutralize a competitive threat through acquisitions, and they may even shut down or discontinued research and development to eliminate potential competition.\textsuperscript{20} Such concentrations have caused key markets online highly concentrated. Killer acquisition is also concerned in China. The SAMR stated in December 2020 that in the review of concentration of undertakings, agencies shall “prevent undertakings from conducting monopolistic conducts through mergers and acquisitions, or from stifling potential competitors and hindering innovation through acquisitions of small and medium-sized enterprises.”\textsuperscript{21}

For the first time, the Platform Guidelines directly address the issue of killer acquisition by stipulating that “[t]he antitrust law enforcement agency under the State Council shall pay close attention to the concentration of undertakings in the field of platform economy where one undertaking participating in the concentration is a start-up enterprise or emerging platform, where the undertaking participating in the concentration adopts the mode of free or low-price, resulting in low turnover, or where relevant market is highly concentrated with small number of competitors, and etc. For the ones below the filing threshold but have or may have the effect of eliminating or restricting competition, the antitrust agency under the State Council shall initiate investigations in accordance with the law.”

It is foreseeable that the killer acquisition strategy implemented by certain large Internet platforms aimed at hindering potential competitors and curbing innovation will be subject to stricter antitrust supervision and intervention.

VI. FINAL NOTE

Unlike traditional industries, business models in the platform economy are complex and volatile, which has brought huge challenges to antitrust law enforcement. Against this background, the promulgation of the Platform Guidelines shows the Chinese government’s firm and explicit determination to overcome difficulties to strengthen antitrust supervision and regulation of the platform economy, in order to facilitate the lawful and benign development of the industry.

While the Platform Guidelines do not go beyond the legal framework set by the AML and the related regulations, they specify and reinstate many rules with a due consideration of the features of the platform economy. They will provide more specific guidelines and greater confidence to antitrust law enforcement in this field. It is foreseeable that after the promulgation of the Platform Guidelines, antitrust supervision in the platform economy will continue to be intensified. Therefore, undertakings in the platform economy must refer to the Platform Guidelines to carefully review their business models, business practices and transactions, to identify antitrust risks and conduct compliance in a timely manner.


CHINESE MERGER CONTROL: PATTERNS AND IMPLICATIONS

Xinzhu Zhang* & Vanessa Yanhua Zhang**

ABSTRACT

China’s Anti-Monopoly Law went into effect on August 1, 2008. Even though enforcement authorities tend to build their capacity progressively, China has already seen three milestone case decisions in the past year: InBev/Anheuser-Busch, Coca-Cola/Huiyuan, and Mitsubishi Rayon/Lucite. In this article, we elaborate the background of each case and provide in-depth analysis of each decision. In particular, we explore the common characteristics of the cases, the economic theories on which the merger control authority has relied in its merger decisions, and the patterns regarding China’s merger policy.

JEL: G34, L4, L5, K21

I. INTRODUCTION

Since China’s Anti-Monopoly Law took effect on August 1, 2008, the State Council and the Ministry of Commerce (MOFCOM), China’s merger control authority, have issued several pieces of regulation and guidelines to implement the Anti-Monopoly Law. Indeed, immediately after the release of the Anti-Monopoly Law, the State Council promulgated the Regulation on Notification Thresholds for Concentration of Undertakings (‘Thresholds Regulation’) on August 3, 2008, which forms the legislative basis for the new pre-merger filing system. In addition, MOFCOM has issued the Guidelines for the Antitrust Filing for Merger and Acquisition of Domestic Enterprises by Foreign Investors (‘Filing Guidelines’), which provides additional guidance on the types of information to be submitted (for example, market definition, competitive conditions, and entry conditions) by the merging parties. It is expected that more documents will be released shortly as the Guideline for Market Definition has just concluded its public consultation.

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2 The most recent set of Filing Guidelines were issued in March 2007 and additional related guidelines are being drafted following the passage of the Anti-Monopoly Law.
and the drafting of the *Guideline for Analysis of Competition Effect of Mergers and Acquisitions* is underway. Indeed, the legal framework for China’s merger control policy is emerging steadily.

Even though the legislative process is still evolving, there have already been more than 50 merger cases so far that have been dealt with under the new anti-monopoly regime. As expected, most filing cases were cleared without being challenged. However, the Anti-Monopoly Bureau at MOFCOM, which is in charge of merger review, has also issued three important case decisions: two approvals with conditions and one rejection. These cases cover different types of mergers with differing competition effects, and have received attention from the public as well as practitioners. Even though commentators have had different reactions to the case decisions, all appear to agree that the new regime will reshape the landscape of China’s merger policy.

With less than one year of enforcement history of the Anti-Monopoly Law, little information is available for analysis as China’s antitrust authorities are still struggling to develop a due process of antitrust control. Nonetheless, given that the three high-profile case decisions may convey interesting information about the enforcement agency’s policy considerations, it is valuable to review the decisions and analyze the theories on which MOFCOM has relied in their merger decisions. Indeed, these cases have attracted a significant amount of discussion in literature. But until recently, all the writings have focused mainly on the individual cases or the procedural issues without exploring the general patterns of the Chinese merger control policy. By systematically studying these

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3 As of the end of June, 2009, MOFCOM has received 58 filed mergers, conducted and closed 46 merger reviews. See MOFCOM Press Release, New Statistics of the Cases on Concentration of Undertakings Reviewed by MOFCOM, July 21, 2009, available at http://fldj.mofcom.gov.cn/aarticle/zcfb/200907/20090706409831.html. According to our conversation with MOFCOM officials, these numbers have dropped dramatically compared with the same period last year partially due to the thresholds set in the Threshold Regulations, which we got deeply involved in the drafting process.

4 We will focus on the first three decisions issued by MOFCOM since the AML took effect on August 1, 2008. There were two additional case decisions released by MOFCOM on September 28 and 29, 2009. One is the approval with behavior remedies on General Motors (GM)’s plan to buy back part of its former auto parts arm Delphi, which was decided on September 28, 2009. In this decision, MOFCOM banned GM and Delphi on exchanging trade secrets of Delphi’s other Chinese customers so that GM will be prevented from getting confidential and competitive information of its rivals. Delphi must also ensure the timeliness and quality of its supplies to other Chinese carmakers and should not discriminate against other carmakers on price or quality. The other one is a conditional approval of Pfizer’s take-over of Wyeth. MOFCOM was worried that the Pfizer-Wyeth deal would restrict competition in the domestic market for animal health products, particularly swine mycoplasma pneumonia vaccine. According to the decision, Pfizer must divest several brands of its swine mycoplasma pneumonia vaccine within six months to eliminate competition concerns. More details of the decisions can be found on MOFCOM’s website.

three cases and the decisions we hope to discover and clarify some emerging patterns regarding China’s merger control policy.

Our article is set out as follows. Section II identifies three milestone cases that MOFCOM has decided since August 2008. In Section III, we conducted an in-depth analysis of the economic theories behind each case decision. Section IV examines the patterns regarding China’s merger control. Finally, Section V concludes.

II. THREE MILESTONES: INBEV/ANHEUSER BUSCH, COCA-COLA/HUIYUAN, AND MITSUBISHI RAYON/LUCITE

Since August 1, 2008, the first three case decisions released by MOFCOM are representative. We first summarize each decision and identify the key points for each case: InBev/Anheuser Busch, Coca-Cola/Huifa, and Mitsubishi Rayon/Lucite. This section will provide background information for the case analysis in Section 3.

A. InBev/Anheuser Busch

On July 13, 2008, Belgium-based beer giant InBev (the owner of Stella Artois) and U.S.-based beer giant Anheuser Busch (the owner of Budweiser) announced InBev’s acquisition of Anheuser Busch (hereinafter ‘AB’) for $49.91 billion. Because InBev and AB’s turnovers in 2007 were 5.76 billion and 4.49 billion CNY ($786.88 million and $589.59 million) in China, respectively, the merger met the notification thresholds and the mandatory filing mechanism was triggered. InBev filed the merger with MOFCOM on September 10, 2008 and the case was officially accepted on October 27, 2008 after InBev met the filing requirements. MOFCOM approved the case on November 18. In other words, the case was decided within the 30-day limit of Phase I.

MOFCOM found that after the transaction, the merger party will hold a relatively large market share and its competitive strength will be increased significantly. In addition, post-merger InBev will hold significant stakes in two of the four largest beer producers in China. MOFCOM thus imposed three main prospective restrictions on InBev:

1) Post-merger InBev should not increase its stakes from pre-merger levels;
2) InBev should not acquire any stakes in either China Resources Snow Breweries or Beijing Yanjing Brewery, the other two largest beer producers in which InBev does not currently have stakes;
3) InBev will be obliged to notify MOFCOM of any changes in its controlling shareholders.

It is the first conditional approval issued by MOFCOM since the AML took effect. MOFCOM found that the proposed transaction did not jeopardize competition in the

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7 Note that under China’s merger review process, the clock of Phase I starts after the file is accepted rather than at the time when the file is submitted.

8 The Decision used the terms ‘market’ and ‘market share’ to describe the shares of beer producers in China but did not present any additional discussion of market definition. See MOFCOM Notice No.95, [2009], available at http://fldj.mofcom.gov.cn/aarticle/ztxx/200811/20081105899216.html.
Chinese beer market on the whole. Both MOFCOM and merging parties have arrived to the mutually acceptable remedies.

B. Coca-Cola/Huiyuan
On September 2, 2008, U.S. soft drink giant Coca-Cola offered to buy Chinese juice maker Huiyuan Juice Group for $2.4 billion. If it endured the merger review by MOFCOM, this acquisition would represent Coca-Cola’s largest proposed acquisition in China and would be the second largest acquisition for Coca-Cola globally. On November 20, 2008, MOFCOM officially started its investigation after sending several requests for supplementary materials to Coca-Cola. Thirty days later, MOFCOM decided to enter Phase II given “the large scale and considerable influence of this concentration.” Concerned by Coca-Cola’s 60.6 percent market share in the carbonated soft drinks (CSD) market in China, on March 20, 2009—exactly 90 days after the case entered Phase II investigation—MOFCOM decided to block the proposed merger for the following reasons:

1) Coca-Cola may extend its dominant position in the CSD market to the fruit drink market post merger and eliminate existing juice enterprises, limit competition, and harm consumer welfare;

2) Coca-Cola may greatly enhance its market power by controlling two well-known brands: Meizhiyuan, currently owned by Coca-Cola and Huiyuan, currently owned by Huiyuan; leverage its market power in the CSD market; and foreclose potential competitors from entering the juice market;

3) The concentration would narrow the space of domestic small and medium-sized fruit juice enterprises, restrain the domestic enterprises from conducting independent R&D, and cause adverse effects on effective competition in the Chinese juice market; and

4) Coca-Cola could not provide necessary remedies that would offset the negative effects of the merger to competition.

The Coca-Cola/Huiyuan decision is the first denial issued by MOFCOM under the AML rules. Coca-Cola and MOFCOM have discussed possible remedies for this proposed merger. However, MOFCOM was not convinced by the proposals provided by Coca-Cola that the competition impact would be mitigated.

C. Mitsubishi Rayon/Lucite
On September 11, 2008, Japanese chemical giant Mitsubishi Rayon Co. announced its acquisition of U.K. plastics maker Lucite International Group for $1.6 billion. Although neither of the companies involved in the deal are based in China, both have operations in China. Their sales in China and worldwide both exceed the notification thresholds prescribed by the Threshold Regulation. On December 22, 2008, Mitsubishi Rayon filed the notification documents with MOFCOM and the antitrust review clock formally

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10 Id.
11 See The Regulation on Notification Thresholds for Concentration of Undertakings, supra note 1.
started on January 20, 2009. After the expiration of the preliminary review period, MOFCOM decided to implement a further review and notified Mitsubishi Rayon that additional review would be finished by May 20, 2009. After a four-month probe, MOFCOM expressed its concerns that the proposed merger could hurt competition given that the merging parties would have a combined market share of 64 percent for methyl methacrylate (MMA) in China. MOFCOM then imposed a divestiture remedy:

1) Lucite China will divest 50 percent of its annual MMA production capacity for a one-time sale to one or several non-related third-party buyers for a period of five years. During this period, the third-party buyers will have the right to purchase MMA products produced by Lucite China at cost-based prices;

2) Lucite will operate independently from the MMA monomer business operations of Mitsubishi Rayon China until the completion of the capacity divestiture; and

3) Both Mitsubishi Rayon and Lucite are restricted in further acquisitions and new plant construction in mainland China.

Mitsubishi Rayon and Lucite have proposed feasible remedies and discussed with MOFCOM regarding the anti-competitive concerns MOFCOM identified. MOFCOM finally determined that the remedies would remove the anti-competitive concerns of this proposed deal and therefore cleared it with conditions.

III. CASE ANALYSIS

Those three milestone case decisions have provided us useful information to conduct economic analysis and explore the patterns of the Chinese merger control. In this section, we will go through each case, retrieve economic analysis behind the case decisions, and provide our own assessments.

A. InBev/Anheuser Busch

China’s beer industry is characterized by constant growth driven by increasing income and changing lifestyle, and by fierce competition among domestic and international companies. The four largest beer companies in China are China Resources Snow Breweries, Tsingtao Breweries, Beijing Yanjing Brewery, and Zhujiang Brewery. One report estimates that these four companies currently account for around 41 percent of industry revenue. Concentration among beer producers has been increasing in the last few years due to mergers and acquisitions. The share of the ten largest firms increased from 37 percent of the total industry revenue in 2001 to 61 percent in 2005.

InBev entered into China’s beer market in 1984 and now has 33 breweries in the country, mainly in Southeast China. AB has also a huge presence in China and its total investment in China has reached 14.6 billion CNY ($1.92 billion) in 2007. Both have made huge equity investments in large, China-based breweries. In particular, pre-merger
Anheuser-Busch had a 27 percent stake in Tsingtao Brewery, and InBev had a 29 percent stake in Zhujiang Brewery. The equity positions of the merging parties in their main competitors attracted the special attention of MOFCOM.

Regarding the three prospective restrictions, we can conduct analysis of the potential competition impact behind the decision. Given that the combination will increase the merged party’s market share significantly, there would be a danger that competition between the merged party and its rivals Tsingtao Brewery and Zhujiang would be dampened if the merged party were allowed to further increase its interests in those two big beer producers, because pre-merger InBev and Anheuser Busch already held significant equity interests in them. Moreover, the anticompetitive danger might loom larger if the merged party was allowed to acquire equity positions in China Resources Snow Breweries and Beijing Yanjing Brewery, the other two largest Chinese players in China. The connection among the market leaders would facilitate collusion among them, eliminate and restrict competition, and thus hurt consumers’ welfare.

As the first major case decision under the newly installed Anti-Monopoly Law framework, one may ask to what extent economic analysis has been conducted. In defining the relevant market, MOFCOM used the terms ‘market’ and ‘market share’ to describe the shares of beer producers in China. However, there is no evidence on how the relevant market has been defined from the InBev/Anheuser-Busch decision released by MOFCOM and from the interview with Mr. Shang Ming, Director General of Anti-Monopoly Bureau, MOFCOM. In particular, one may wonder how the geographic dimension of relevant market had been addressed. Indeed, defining geographic markets is very important for beer consumption. Beer is sold to consumers in regional geographic markets through a special distribution system in which the breweries sell beer to distributors, which, in turn, sell to retailers. The distributors' contracts with brewers contain territorial limits and prohibit the distributors from selling beer outside their respective territories. Because the distributors cannot sell a brewer’s products outside their territories without violating their contracts with the brewer, brewers can charge different prices in different regions for the same package and brand of beer, and individual distributors (and retailers) cannot defeat such price differences through arbitrage. In other words, due to such contractual arrangements, the relevant geographic beer market should be defined as regional.

The InBev/Anheuser-Busch decision did not reveal any information about the competitive impact assessment of the case either. In fact, even though MOFCOM noticed increasing market share and competition strength of the merger party in this case, it did not find immediate competition concerns and believed that the current structural factors will ensure effective competition in the Chinese beer market even though the merged party holds significant stakes in its rivals. However, MOFCOM was indeed concerned by the induced anticompetitive effect if the merged party further increased its stake in its

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17 Due to lack of information on relevant market in the case decision, we can only refer to the general situation of competition in term of national market.
But as a matter of principle, economic analysis should be conducted to show to what extent ownership connection between InBev-Anheuser Busch and its rivals reduced competition and whether entry conditions such as efficient scale of production and brand effect would function as barriers. Meanwhile, economic analysis is needed to prove that beer purchasers are unlikely to cut their purchases in response to a small but significant and non-transitory increase in the price of beer to an extent that would make such a price increase unprofitable. For instance, there is usually strong brand effect in the beer markets. In addition, some regions in China are notorious for local protectionism of their beer markets. But there is no evidence of how these aspects of barriers to entry were taken into account in the review.

A crucial problem with the remedy comes from the fact that MOFCOM kept silent on their definition of geographic markets, and thus one cannot know whether it addressed the competition concerns adequately. Indeed, the remedy prohibits InBev from increasing post-merger stakes in Tsingtao Brewery and Zhujiang Brewer above the pre-merger levels and from acquiring any stakes in either China Resources Snow Breweries or Beijing Yanjing Brewery. Such restrictions were meant to prevent potential monopolistic agreements between the merged company and its rivals, which might be facilitated by InBev’s holding of equity positions in its rivals. Indeed, economic theory of collusion suggests that maintaining tacit collusion relies critically on the relevant factors such as market shares, entry barriers, and so on. Given the regional nature of beer markets, the competition conditions are likely to differ across regional markets. Therefore, increasing the merged party’s equity positions in its rivals may not necessarily induce an anticompetitive effect in all the regional markets. In other words, the remedy should only address those regional markets that raise competition concerns.

Another problem with the remedy is related to its behavioral aspect. As discussed above, the remedy is designed to prohibit InBev’s holding of any equity positions in its rivals. But this behavioral restriction may be counter-productive because it deprives the merged company the opportunity to make any equity investments in rival companies even if there is no anticompetitive effect. The immediate imposition of the remedy may signify MOFCOM’s concern over its limited enforcement capability that prevents it from dealing with any possible monopolistic agreements adequately.

Because there is not sufficient evidence from MOFCOM for evaluating the soundness of the decision, one may be tempted to compare the InBev/Anheuser-Busch decision with those under other jurisdictions, although differences in regional competition concerns should be kept in mind. Because InBev/Anheuser Busch is a global

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18 One may ask why MOFCOM did not impose divesture if it is concerned by the merger firm’s stake in its rivals. MOFCOM’s decision seems to suggest that it was not concerned immediately by the current stake but was worried only about an increase of the future stake. So divesture is not warranted.


merger, it has to be reviewed in light of treatment from other jurisdictions. In fact, the same merger was cleared in both the United States and the United Kingdom, where both competition authorities took a slightly different approach in considering the regional issues in the respective jurisdictions. In the United States, for instance, in certain geographic markets the Department of Justice imposed the divestiture of InBev’s subsidiary, Labatt USA, along with a license to brew, market, promote, and sell Labatt brand beer for consumption in the United States to ensure that “consumers will continue to benefit from the significant competition between the merging companies in upstate New York.” Interestingly, the DOJ imposed structural remedies that are presumably more restrictive than the behavior remedies sanctioned by MOFCOM. In the United Kingdom, however, the merger was cleared by the Office of Fair Trade without any restrictions. The OFT’s preliminary concerns focused on the on-trade channel, but it eventually found “there was no realistic prospect that drinkers of Stella, Beck’s, or Bud would pay more as a result of this merger.”

Another useful benchmark is to look at the previous cases. Before the InBev/Anheuser Busch decision was made on June 5, 2008, the U.S. Department of Justice cleared another U.S. distribution merger between the SABMiller and Molson Coors, the second and the third largest brewers in the United States, right behind Anheuser Busch. With two companies consolidating roughly 29 percent of the total beer market in the United States, this merger endured a thorough eight-month investigation conducted by the Department of Justice. The Antitrust Division determined that “the proposed joint venture between Miller and Coors is not likely to lessen competition substantially.” The key point is that such a proposed merger was found likely to produce substantial and credible savings that will significantly reduce the companies’ costs of producing and distributing beer, which would in turn eventually have a beneficial effect on prices. This case is an important example for the Chinese merger control authority to weigh the efficiency gains and anticompetitive effects before it arrives at a sound conclusion.

From these decisions one may conclude that, although the decision making process in China may be less transparent than other jurisdictions, the decision made by China’s antitrust agency is by and large consistent with the international practice in the sense that it is neither more restrictive nor more relaxed than the analogous decisions of other authorities. But an important caveat should be made that it is unclear whether the critical issue of geographic market has been properly addressed, which may raise doubts about the soundness of the decision.

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B. Coca-Cola/Huiyuan

This is the first merger blocked by the merger control authority in China since China installed the merger control mechanism. One of the key issues in this case is to define the relevant markets properly. As Coca-Cola and Huiyuan have overlapping businesses in fruit juice products, MOFCOM defined the relevant product market to be the fruit juice market\(^ {26} \) according to the Coca-Cola decision\(^ {27} \) released by MOFCOM and in the Q&A with Mr. Yao Jian, the spokesman of MOFCOM.\(^ {28} \) The main reasoning that the fruit juice market was taken to be the relevant product market is that different fruit juice drinks, such as 100 percent juice, 26 to 99 percent juice, and less than 25 percent juice based on the juice content,\(^ {29} \) are highly substitutable among each other but they have low substitutability with CSDs. There is no evidence of the type of analysis used and how MOFCOM arrived at such conclusions. But from the economic literature and experiences of other jurisdictions, the definition of relevant market for the soft drink industry is far from a forgone conclusion and requires solid economic analysis.

Indeed, there is a large economic literature on the market definition of soft drink industry or CSDs,\(^ {30} \) which is encouraged by the increasing availability of brand level economic data collected by A.C. Nielsen and Information Resources Inc. from supermarket checkout scanners. Although a thorough review of the literature is out of the scope of this article, it is enlightening to recall the key results of the academic research. Most research focuses on brand competition between two merging parties and uses the two important proposed mergers in the United States: Coca-Cola/Dr. Pepper and Pepsi/Seven-Up. The former one was blocked by the FTC and Pepsi called off the latter merger just before the trial.\(^ {31} \) The results from these papers are mixed, suggesting that depending on the case, either a narrower or a broader product market definition is

\(^{26}\) The definition of geographic market is also not stated. Because of the special distributors’ contracts between producers and distributors, the geographic market is estimated to be regional market.


\(^{28}\) See MOFCOM Q&A, supra note 9.

\(^{29}\) Id.


possible.\textsuperscript{32} For example, CSD has been studied as a relevant market and empirical and theoretical economic analysis has been conducted to estimate price reactions elasticities, which, in turn, enables economists to measure market power effects. This conclusion asks for case by case analysis to define a relevant market.\textsuperscript{33}

Although the fruit juice was defined as the relevant market, MOFCOM still did not reveal much information on the merging parties’ market shares and the concentration level in the fruit juice market. Indeed, market shares in the fruit juice market vary depending on different sources. For instance, one source shows that the top three fruit juice producers, Uni-President, Coca-Cola, and Huiyuan, had market shares of 18.69 percent, 15.04 percent, 13.95 percent, respectively, in 2007.\textsuperscript{34} Based on this information, therefore, post merger Coca-Cola/Huiyuan would have a combined market share of 28.99 percent and become the largest fruit juice producer; all available public sources confirmed this, indicating that post merger Coca-Cola/Huiyuan’s market share would be less than 30 percent. According to Article 19 of the Anti-Monopoly Law, with a market share at this level the merged party would not possess on a \textit{prima facie} basis market power in the fruit juice market post merger, so MOFCOM cannot establish a \textit{prima facie} case based on horizontal effect.

In addition, MOFCOM defined the carbonated soft drink (CSD) market and calculated that Coca-Cola has a market share of 60.6 percent in the CSD market, and thus presumed that it has market power in the relevant market based on Article 19 of the Anti-Monopoly Law. Given Coca-Cola’s deemed market power in the CSD market, MOFCOM further presumed that it might leverage this market power in the CSD market into the fruit juice market, which would be strengthened by Huiyuan’s market position if the merger were allowed. More precisely, Coca-Cola might take advantage of its market power in the CSD market and use tying, bundling, or discriminatory pricing strategies to exert market foreclosure, that is to eliminate and restrict competition in the juice market and thus hurt consumers’ welfare by increasing prices, reducing product choices, and dampening innovations.\textsuperscript{35} In other words, based mainly on Coca-Cola’s market power in the CSD market, MOFCOM established a \textit{prima facie} case for market foreclosure. Interestingly, the merger seemed to be treated as a horizontal merger as market definition focused on overlapping businesses. But because the Decision was mainly concerned with

\textsuperscript{32} There are a few articles suggesting a narrower product market—cola-flavored soft drinks—in which Dr. Pepper did not compete. See Jonathan B. Baker, \textit{Market Definition: an Analytical Overview}, 74 \textit{Antitrust L.J.} 129 (2007).

\textsuperscript{33} A recent merger case between Nestle and Perrier seems to suggest that waters are distinguished from soft drinks in defining relevant product market. In this case the merging party Nestle considered all soft drinks, including water and colas, to be in the relevant product market. However, the Commission initially considered two potential relevant product markets: high mineralized still water and low mineralized still water. With price correlation analysis, little correlation has been found between either still or sparkling waters and soft drinks. But there were significant correlations between still waters and sparkling waters. Such evidence suggested that the market should include all bottled water, both still and sparkling, but exclude soft drinks. The Commission ultimately required a divestiture of the assets when it cleared the merger.


cross-market competition effects, MOFCOM actually established a conglomerate merger case. Indeed, MOFCOM was not concerned at all by either collusive effect or unilateral restriction of competition in the fruit juice market.

In fact, a conglomerate merger requires higher standard of proof and thus has received a greater lenience when competition authorities review competitive issues. For example, the U.S. antitrust authorities usually take rather tolerant attitudes toward any competition concerns raised in conglomerate mergers.36 In the United Kingdom, the Competition Commission Guidelines note that conglomerate mergers do not necessarily cause an anticompetitive effect while providing several scenarios that might be problematic.37 Similar conditions were recognized by the European Commission even though conglomerate cases were established occasionally in E.U.38 and other jurisdictions such as Australia.39 Portfolio power might be the main focus of a potentially harmful conglomerate merger. However, this effect will arise when merging parties have market power in at least one market and are also active in one or more other connected markets.

More importantly, as a matter of principle, the possibility of competitive harm is only one step in establishing a market foreclosure case. Indeed, the presumption of competition harm also requires the antitrust authority to establish that the merging parties have both the incentive and the ability to bundle and tie the products to leverage market power from one market into another, that is, to foreclose competitors from entering the fruit juice market. MOFCOM only mentioned the strong brand effect as an entry barrier to the fruit juice market to satisfy its burden of proof. Otherwise, MOFCOM did not provide analysis on the incentive and the ability of the merged party to foreclose competitors.

It seems that MOFCOM has tried to establish a *prima facie* case based mainly on market shares. Such an enforcement strategy can be understandable because MOFCOM wants to ease its burden of proof when it is still building its enforcement capacity. However, this enforcement strategy of creating a *prima facie* case implies that the burden of proof shifts to the merging parties. Therefore, a due rebuttal process is extremely important to avoid mistakes. For a foreclosure case such requirement is even more important as non-horizontal merger cases are presumed to be efficient at the first place, for example efficiency gains resultant from integration of the distribution channels of Coca-Cola and Huiyuan may have been significant. The decision provided no evidence on the rebuttal process, which may reduce the soundness of the analysis.

It seems that MOFCOM has based the market foreclosure theory on a narrow market definition, concluding that Coca-Cola had a high market share in the CSD market.

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39 It was widely believed that MOFCOM has been directly influenced to some extent by the ACCC decision of the Coca-Cola/Berri case, which bears a close resemblance to the Coca-Cola/Huiyuan case. See ACCC assessment of Coca-Cola Amatil Limited’s proposed acquisition of Berri Limited, available at http://www.acc.cov.au/content/item.phtml?itemId=503214&nodeId=933c0f7f72fe1be102c39b6243b815&fn=Coca-Cola+Amatil+Ltd's+proposed+acquisition+of+Berr+Ltd+-+8+October+2003+-+re+carbonated+soft+drin.
If, instead, the relevant market was defined as the soft drink market, the market share of both merging parties would drop below the critical levels\(^{40}\) that typically result in challenges from competition authorities. However, a narrow market definition is not necessary for authorities to address anticompetitive concerns. Indeed, an alternative competition theory may be a unilateral story whereby the merging parties compete fiercely pre-merger with differentiated products and there is strong brand effect. Post-merger regional competition between Coca-Cola and Huiyuan will be internalized. If there were significant entry barriers, with a high diversion ratio and mark-up, the merged party would be able to increase price by a small but significant and non transitory amount without losing sufficient sales to make such a price increase unprofitable.

C. Mitsubishi Rayon/Lucite

The main business of both Mitsubishi Rayon and Lucite in China is production and sales of methyl methacrylate (MMA), a polymer necessary to make acrylic glass. Pre-merger Mitsubishi Rayon and Lucite were respectively the fourth largest and the largest producers of MMA in the world.\(^{41}\) Besides MMA, the two companies also have some overlap on a few special SpMAs, PMMA acrylic moulding compounds, and PMMA acrylic sheet. This concentration has little impact on the market of the three products above except for MMA.\(^{42}\) Therefore, one of the main concerns in the Mitsubishi Rayon/Lucite case is their overlap in the MMA markets. In addition, because both companies are involved in vertical activities of which MMA is an input, there may be concerns regarding vertical competition issues.

In this case the MMA was defined as the relevant product market. MOFCOM calculated that post-merger the market share of the merged party would be 64 percent and thus presumed that Mitsubishi Rayon/Lucite would have market power post-merger. Again, depending on this high market share, MOFCOM established a \textit{prima facie} case for horizontal competition effect. An interesting issue involved in market definition or in the calculation of market share is the consideration of new capacity due to upcoming production. Since the case was filed in December 2008, market shares had to be calculated based on 2008 data according to the filing requirements. But a new company, Evonik Degussa Shanghai, was due to begin production in late 2009. If this new capacity as well as a small scale of domestic production facilities were taken into account, the merging parties claimed that their market share would be less than 40 percent. Moreover, it seems that MOFCOM has assumed a national geographic market. But industrial analysis suggests that to a certain extent international competition matters in this market. Indeed, some countries are increasing their capacities and a zero-tariff has been imposed between China and its counterparts in the ASEAN.\(^{43}\) The merging parties claimed that if these factors are considered in market definition and the calculation of market shares, anti-competitive concerns may cease to matter.

\(^{40}\) \textit{See} The Regulation on Notification Thresholds for Concentration of Undertakings, \textit{supra} note 1.


\(^{42}\) The relevant geographic market is Chinese market.

\(^{43}\) \textit{See} Wang & Yan, \textit{supra} note 41.
After presuming market power in the MMA market largely due to high market shares, MOFCOM presumed two competition theories in the support of its decision. One is that the combination of Mitsubishi Rayon and Lucite’s MMA production and sales will significantly reduce competition. Note that this is a unilateral effect with homogeneous goods, which depends critically not only on structural factors, such as concentration level and market shares, but also on entry conditions. But unfortunately, no informative evidence can be inferred as to how entry analysis was conducted. Another presumption is that Mitsubishi Rayon/Lucite may leverage its market power in the MMA market to eliminate and restrict competition in downstream markets. Note that in contrast to the Coca-Cola/Huiyuan case where the competition effect is horizontal foreclosure, the competition concern here would be vertical foreclosure. Again, no evidence can be found in the decision on how entry analysis was conducted in this respect.

There may be some potential problems with the remedies too. For instance, MOFCOM proposed a modification that would prevent the merged company from building additional industry capacity. In a sense this remedy was designed to promote competition by protecting rivals, which may be anticompetitive itself. Moreover, there was again a behavioral aspect to the remedies, including price setting—the third-party buyers will be eligible to purchase MMA products from Lucite China at cost-based prices. This restriction is particularly problematic as it forces MOFCOM to play a regulatory role of price setter, for which it is mis-suited by nature. As the practice of price regulation demonstrated vividly worldwide, it is simply a daunting task for regulators to set prices due to not only the complicated tradeoffs that must be made but also lots of implementation issues such as allocation of costs. For this very reason price setting as a remedy to anticompetitive concerns is rarely used by antitrust authorities in other jurisdictions.

Because the Mitsubishi Rayon/Lucite case is a global merger, a relevant question is whether the decision made by MOFCOM is consistent with other jurisdictions. The same merger was cleared without any conditions in six other countries and regions, including the United States, Europe, and Taiwan. Most merger control authorities thought the merger would not harm competition and the benefit was likely to outweigh any disadvantages that might result from competition restraints. However, when comparing the decisions under different jurisdictions, one has to keep in mind that the difference may be driven by the need to address local competition concerns.

IV. IMPLICATIONS OF THE CASES

In the last section we briefly analyze common threads emerging from the three milestone cases decided under China’s new merger control regime. We agree that the analysis may sound speculative due to absence of detailed information, but we believe it may be helpful nonetheless for understanding China’s merger policy.

First, the timing and circumstances of three mergers in ‘Phase I’ is interesting. The parties submitted information and responded to requests from MOFCOM before formally entering the 30 day Phase I period. These discussions included consideration of

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45 See, e.g., Taiwan FTC’s decision in Chinese, available at http://www.ftc.gov.tw/upload/a6a61c72-ddf6-4b0c-9fa9-0c57dbbe0767.pdf.
potential remedies,\textsuperscript{46} which indicates that MOFCOM is open to a substantive dialogue early on. Developing an advanced understanding of potential concerns that MOFCOM is likely to have and having a plan for restrictions that are acceptable to the merging parties is important. However, such timing leaves a question as to whether it is efficient to collect more information in Phase I rather than in Phase II, when more information is necessary for case review.

Second, MOFCOM has obviously consulted the decisions of other jurisdictions’ antitrust agencies, while at the same time taking relevant country-specific competition conditions into consideration. As a result, the decisions are by and large consistent with international practices. Indeed, MOFCOM did approve the \textit{InBev/Anheuser Busch} case and the \textit{Mitsubishi Rayon/Lucite} case as other jurisdictions did, but it also imposed different modifications in these two cases. As for the Coca-Cola/Huuyuan case, there is evidence suggesting that MOFCOM consulted the decision of the Coca-Cola/Berri case made by ACCC. These decisions signify MOFCOM’s willingness to follow international practices while actually deciding cases in its own way as relevant for China. But it is also important to note that the decisions made by MOFCOM are different in some important aspects from similar case decisions in other jurisdictions. For example, in the United States the critical issue of geographic market in the \textit{InBev/Anheuser Busch} case was addressed directly and remedies were designed accordingly, but it is doubtful whether such competition concerns have been addressed adequately by MOFCOM.

Third, to establish a \textit{prima facie} case, MOFCOM tended to rely on high market shares to presume market power but there was no indication of whether alternative evidence such as concentration level and other structural factors was considered. This is not necessarily unpromising given MOFCOM’s current enforcement capability. But such an enforcement strategy implies that a significant part of the burden of proof shifts to the merging parties. Therefore, a due procedure allowing proper rebuttal process is important to build up quickly.

Fourth, the released case decisions demonstrate that MOFCOM has dealt with both horizontal (collusive effect in the \textit{InBev/Anheuser Busch} case and unilateral effect in the \textit{Mitsubishi Rayon/Lucite} case) and non-horizontal mergers. But it often established non-horizontal cases by presuming foreclosure theory (Coca-Cola/Huuyuan and Mitsubishi Rayon/Lucite) without realizing the necessity of the heavy burden of proof for presumptions of such competition harms. Indeed, international experience suggests that antitrust authorities worldwide are somehow reluctant to apply theories dealing with non-horizontal anti-competitive effects due to the intrinsic features of non-horizontal mergers. Thus establishing such non-horizontal cases by MOFCOM may imply that structural factors such as high market shares have played an important role in establishing a case. In this circumstance, the lack of a proper rebuttal process would question the prudence of case decisions.

Fifth, both behavioral and structural remedies were imposed by MOFCOM. In the \textit{InBev/Anheuser Busch} case, MOFCOM imposed mainly behavioral remedies. In the

Mitsubishi Rayon/Lucite case, a structural divesture of 50 percent capacity was imposed by MOFCOM. In addition, several behavioral remedies were imposed such as the contractual terms between Mitsubishi Rayon and Lucite. The co-existence of behavioral and structural remedies definitely challenges MOFCOM’s capability of enforcement as behavioral remedies are more difficult to enforce than structural ones. More importantly, some behavioral aspects of the remedies necessarily force the antitrust agency to function as an industrial regulator for which it is mis-suited by nature. For instance, it will be extremely difficult to enforce the contractual term in which the non-related third-party buyers have the right to buy MMA from the merged party at a price only covering production cost for five years. International practice suggests that such behavioral remedies are rarely, if ever, used by antitrust authorities in other jurisdictions worldwide.

Sixth, the enforcement strategy of MOFCOM seems prudent. As a new agency in a developing country such as China, MOFCOM appears to favor the use of remedies more than complete closure of a deal. To avoid severe criticism and probably political pressure, it could be an optimal strategy for MOFCOM to approve mergers with conditions, especially behavioral conditions such as price guarantees, rather than preventing them outright. However, this strategy will gradually demand that more and more sectors of the economy need to be monitored, more and more markets are quasi-regulated by quasi-consent decrees, and more and more agency resources are required by past cases as opposed to current and future cases. These consequences impose pressure on MOFCOM to cease such a strategy when the burden it imposes becomes untenable.

Seventh, the impact of MOFCOM’s blocking the Coca-Cola deal is profound. In fact, this case decision was made when MOFCOM was still building its credibility and some were questioning whether it would commit to a sound, consistent enforcement policy. Although some may question insufficient information disclosure, this case together with the other two cases may help build MOFCOM’s reputation as a strong enforcer of merger control policy.

Eighth, MOFCOM is developing the capability to deal with cases promptly. One serious concern by most observers is that MOFCOM needs to sharpen its tools of economic analysis to make sound decisions. For example, in the InBev/Anheuser Busch case there was no clear evidence on how economic analysis has been applied on market definition and the competitive effects behind the remedies. But in the Coca-Cola/Huiyuan and the Mitsubishi Rayon/Lucite cases, market definition was obviously one of the central concerns and competition theories were presumed to be more sophisticated. Of course, there was no evidence of how the relevant market was defined, no detailed information regarding how competition analysis was conducted, no entry analysis, and so forth. Without such critical information about what the case decisions were based upon, there is no dispute that MOFCOM is making quick judgments.

Ninth, for the time being, the Chinese government is struggling to maintain independence in its merger control enforcement. Ever since MOFCOM began to enforce merger control under the new competition policy regime, scholars and practitioners have been concerned that the review of merger cases will be influenced by industrial policy considerations. This concern is strengthened by the institutional structure of administrative enforcement, as MOFCOM is a member of the Cabinet, and by its under-developed procedure of due-process, for example, relying on back-to-back discussions rather than on an adversary process, the lack of transparency in the decision making.
process, unsatisfactory information disclosure, and so forth. In fact, there are some concerns that the case decisions have been influenced significantly by political considerations rather than based on sound and professional competition analysis. For example, many observers critiqued that the proposed merger of Coca-Cola and Huiyuan was blocked due largely to nationalism. But there are also arguments suggesting that the case was decided mainly on neutral assessment of competition effects.\(^{47}\) In our opinion it is still too early to draw definite conclusions about whether China might use the law to ward off acquisitive foreign companies and protect domestic firms because until recently only a very small number of significant cases had occurred. More importantly, realizing that the lack of transparency over the decision making process will increase the speculation that merger control is not independent, MOFCOM is making an effort to build capacity and ameliorate the procedural problems to make a credible commitment to separating antitrust enforcement from industrial policy considerations.\(^{48}\) Indeed, as a new government agency that needs to build its credibility, MOFCOM has every incentive to do so.

Tenth, information disclosure is one aspect that China’s antitrust authorities can and should improve in the short term. In all three cases discussed above, the decisions suffered from the deficiencies that the information released was insufficient. Adding to the points already made above, it was not clear how demand and supply substitutions were considered in determining the market definition. Moreover, the basis for the competition theories was not indicated. Nor were details of the competition analysis made known to the public. Improvement of information disclosure will not only add credibility to the antitrust agencies but would also help industries and practitioners to understand the decision making process, properly assess the impact of their competition strategies, and improve their compliance with the prevailing competition rules.

V. CONCLUSION

As China follows its strategy to build a socialist market economy, it has committed to a sound competition policy to ensure well-functioning market mechanisms. Because it is still less than a year after the Anti-Monopoly Law took effect, China’s antitrust agencies’ main focus is to issue regulations implementing the Anti-Monopoly Law—enforcement activities are only beginning in the new regime. Up to now, MOFCOM alone has produced significant cases. Based on the experience of the merger enforcement agency, it seems that China’s government is on its way to building a reputation for committing to a sound competition policy.

Indeed, in reviewing the three milestone cases decided by MOFCOM so far, we conclude that the decisions are by and large consistent with international practice, while still addressing country-specific competition concerns. The enforcement developments

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\(^{47}\) Some argued that the decision would benefit Coco-Cola Company because the global financial crisis has pushed the stock prices down substantially across countries and the decision can be defended to a large extent by MOFCOM’s concern that it would be extremely difficult to address abuse of dominance in the future if the case were cleared given its limited enforcement capability.

therefore seem encouraging and promising overall. However, we also would like to note that there are certain potential weaknesses in the case decisions that are at odds with international practice. For example, the critical issues of market definition may have not been addressed appropriately, which may render the remedy to address anticompetitive concerns inadequately. In addition, behavioral remedies such as price setting have frequently been relied upon, which will be too demanding for the merger control agency to implement. Moreover, the decision process is not quite transparent according to international standard, which complicates concerns that the decisions may have been interfered by factors other than competition assessment.

The main direction that China needs to improve is increasing information disclosure of the authorities’ analysis. This will continue to be the case as China’s antitrust authorities sharpen their economic analysis tools and try to build a procedure of due process. We believe that as more experience accumulates, the new competition policy regime will become sounder.
NON-HORIZONTAL MERGERS IN CHINA: A CASE STUDY OF KLA-TENCOR/ORBOTECH

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I. INTRODUCTION

On February 13, 2019, China’s State Administration for Market Regulation (“SAMR”) conditionally approved KLA-Tencor Corporation’s (“KLA-Tencor”) acquisition of Orbotech Ltd. (“Orbotech”), which marks the final antitrust clearance of this global transaction in all the related jurisdictions around the globe. KLA-Tencor and Orbotech (collectively the “Parties”) reached an acquisition agreement on March 18, 2018, with KLA-Tencor planning to acquire all of Orbotech’s shares in cash and stock. After the acquisition, Orbotech will become a KLA-Tencor wholly-owned subsidiary.

On April 28, 2018, SAMR received the filing application from the Parties, and commenced the preliminary review process on June 26, 2018. On July 25, 2018, SAMR decided to conduct further investigation into this merger request and extended the investigation period. When the extended phase of further investigation expired on December 18, 2018, the Parties of the merger request withdrew the application. However, on December 20, 2018, the Parties re-submitted the filing application. SAMR was concerned that this merger might have an adverse impact of excluding and restricting competition in the semiconductor deposition and etching equipment market where Orbotech operates.

Upon investigation, SAMR concluded that KLA-Tencor and Orbotech had both vertical and conglomerate relationship in the markets of process control equipment, deposition equipment, and etching equipment. To address the competition concerns of SAMR, the Parties submitted the remedial plan on February 1, 2019, which, according to SAMR, could ease the expressed unfavorable effects.

Considering the potential effect of excluding and restricting competition in the markets of semiconductor deposition and etching equipment, as well as the remedial plan, SAMR decided to approve the merger request with a set of conditions, which will be valid for five years from February 13, 2019. The Parties and the merged entity are required to continuously provide semiconductor process control equipment and related services to the manufacturers of deposition and/or etching equipment in the Chinese market by following the Fair, Reasonable and Non-Discriminatory (“FRAND”) principle. They are also prohibited from conducting tying/bundling or imposing unreasonable transaction conditions without proper reasons when supplying semiconductor process control equipment and deposition and/or etching equipment in the Chinese market. Orbotech is also prohibited from accessing the protected information belonging to other manufacturers of deposition and/or etching equipment.

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II. CASE ANALYSIS

Founded in the U.S. in 1997, KLA-Tencor is a NASDAQ-listed company. It provides advanced process control and process-enabling solutions for manufacturing wafers and reticles, integrated circuits, printed circuit boards, packaging, and flat panel displays. KLA-Tencor has businesses across the globe, covering the U.S., Germany, France, Italy, Mainland China, India, Korea, Japan, Taiwan, etc. KLA-Tencor is also expanding its businesses and has established ten offices in China.\(^3\)

Founded in Israel in 1981 and also a NASDAQ-listed company, Orbotech’s main products include production and inspection equipment for printed circuit boards (“PCBs”), advanced packaging, flat panel displays (“FPDs”), and etching and deposition equipment for front-end specialty applications and back-end advanced packaging for the semiconductor industry.\(^4\) In May 2011, Orbotech established Orbotech Electronics (Suzhou) Co., Ltd. in Suzhou, China, which is engaged in the test and development of automated optical inspection (“AOI”) equipment software and maintenance services.\(^5\)

A. Market Definition

According to the SAMR decision, SAMR defined a global market of process control equipment, deposition equipment for specialty and advanced packaging, and etching equipment for specialty and advanced packaging as the relevant markets and concluded that the merger has or may have the effect of potentially excluding and restricting competition in the markets of semiconductor deposition and etching equipment.

Process control equipment is used to monitor the manufacturing and packaging procedures of semiconductor components, inspect the defects during the manufacturing procedures and measure the key indicators, which can be divided into the categories of leading-edge applications (for leading-edge devices manufacturing wafers smaller than 28 nanometers), specialty applications (for specialty devices manufacturing wafer bigger than 28 nanometers) and advanced packaging applications (for detecting defects and measuring indicators in back-end wafer packaging) according to the applicable procedures and various precision requirements. Deposition equipment adds thin layers of conductive or non-conductive materials to a wafer, while etching equipment selectively removes materials from unmasked portions of a wafer. Etching and deposition equipment can also be divided into the categories of leading-edge, specialties and advanced packaging applications.

With the rapid development of the manufacturing and packaging techniques for semiconductor components, there are no constant and well-defined boundaries for leading-edge applications, specialty applications, and advanced packaging applications.

KLA-Tencor’s businesses cover process control equipment mostly for leading-edge applications, although its products are also finding some limited usages for specialties and advanced packaging applications. Orbotech products cover specialties and advanced packaging etching and deposition equipment. But as technology evolves, it may have the possibility of entering the leading-edge etching and deposition equipment market. Therefore, SAMR defined the following relevant product markets: i.e. process control equipment, deposition equipment for specialty and advanced packaging applications, and etching equipment for specialty and advanced packaging applications. Meanwhile, SAMR also analyzed the potential effect of the transaction on the market of deposition and etching equipment for leading-edge applications.

Due to no obvious barrier on cross-border sales of semiconductor equipment and the global supply and procurement nature of semiconductor equipment, the geographic market is naturally defined as the global market. However, as more than 80 percent of China’s semiconductor equipment is imported, SAMR also focused on the merger impact on the China market.

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B. Theory of Harm

Upon investigation, SAMR raised concerns regarding the merger’s potential adverse impact of harming competition in the relevant markets. The theory of harm is essentially built on the spillover effect which is related to the nature of a conglomerate merger. In other words, the competition concern comes from the possibility that the merged entity would leverage its market position in one relevant market to exclude and restrict competition in another relevant market.

The most important is how the theory of harm works in this case. According to SAMR, the merged entity would have a dominant position in the market of process control equipment, with the market share of 50-55 percent and 55-60 percent respectively in the global and China markets. Note that the process control equipment is used mostly for leading edge applications. Market power is then hypothesized to be leveraged to expand and strengthen the merged entity’s (Orbotech’s) position in the market of etching and deposition equipment, which are almost exclusively used for specialty and advanced packaging applications. SAMR was concerned that the merged entity would conduct vertical foreclosure against other etching and deposition equipment manufacturers through the measures of refusal to deal, differentiated treatment, unreasonably excessive pricing, etc. SAMR also looked into the possibility of bundling, which might harm competition in the etching and deposition equipment markets.

As experts retained by the filing Parties, our view is that there is no horizontally overlapping business and very limited vertical relationship between the two merging companies. This merger is a conglomerate merger, which involves the acquisition of complementary products in neighboring markets (the market of process control equipment and the market of etching and deposition equipment). As a matter of antitrust economics, a conglomerate merger may raise limited or no antitrust concerns, which is generally procompetitive and often brings efficiency gains to the industry.

Conglomerate transactions potentially harm competition only when a party with significant market power in one market is able to engage in tying, bundling, or other means to gain market share in another relevant market. Although this type of transaction is technically and hypothetically possible, we show that there is a decided lack of economic incentive to do so. In other words, there are costs, in the form of loss of sales for example, associated with this type of tying conduct, and the upside gains in the deposition and etching markets pale in comparison to this loss. Furthermore, even if the Parties could do so, the conduct does not necessarily cause harm to competition or overall consumer welfare. On the contrary, a mixed bundling strategy could in fact be welfare-enhancing and beneficial to the demand side under normal circumstances.7

Considering the low entry threshold in the relevant markets of both process control equipment for specialty application and for wafer-level advanced packaging applications, and the vibrant competition in the areas from many alternative suppliers and the second-hand equipment brokers, even if KLA-Tencor has a high market share, it lacks substantive market power in the relevant markets. Thus, although tying and bundling are technically and hypothetically feasible, whether it is commercially capable of doing so is very much questionable. That is, even if KLA-Tencor engaged in tying and bundling, customers of KLA-Tencor or Orbotech may easily respond by simply switching to an alternative supplier. There would be no harm to competition.

III. POLICY IMPLICATIONS

A. Remedies

Based on our analysis, the merger would cause little harm to competition in any of the relevant markets of concern to SAMR. Nevertheless, SAMR still took a remedial approach, presumably out of an abundance of caution, which is all understandable given the Chinese government’s intense interest of developing the semiconductor industry through indigenous innovation. The tying and bundling practice, albeit totally unlikely in our view, is still explicitly prohibited by SAMR for five years after the approval of the merger. In addition, according to the remedial plan, which only includes behavioral remedies, KLA-Tencor, Orbotech, and the merged entity shall continue to provide semiconductor process control equipment and services to etching and/or deposition equipment manufacturers in China under the FRAND principle. Moreover, they cannot impose unreasonable transaction conditions without proper reasons. Orbotech is also prohibited from accessing the protected information of other manufacturers of deposition and/or etching equipment.

B. Patterns of Remedies from Previous Cases

As far as we know, SAMR has conditionally approved 8 conglomerate mergers and blocked 1 merger (Coca-Cola/Huiyuan) from 2008 to 2019. It certainly has an obvious preference for behavioral remedies versus structural remedies, as all of the 8 mergers were imposed with behavioral remedies. In Table 1 below, we summarize these mergers and the associated remedies imposed by SAMR.

These mergers cover a wide range of industries, including energy, e-commerce, electronics, semiconductor, printer, glasses, and aviation. The duration of these behavioral remedies was mostly 5 years.

SAMR imposed only behavioral remedies on the pure conglomerate mergers and vertical and conglomerate mergers, which are GE/Shenhua, Walmart/Yihaodian, Merck/AZ Electronics, Broadcom/Brocade, and KLA-Tencor/Orbotech. Regarding the three mergers which are at least horizontal and conglomerate, only one was imposed with both structural and behavioral remedies, which is United Technologies/Rockwell Collins. The structural remedies require the divestiture of relevant assets but do not require an upfront buyer before the completion of the merger. And the behavioral remedies are mostly relevant to no tying or bundling practices, continued supply of relevant products and services, no differentiated treatment, no disclosure of relevant business information, etc.

Table 1. Remedy for Conditionally Approved Conglomerate Mergers

<table>
<thead>
<tr>
<th>Case</th>
<th>Date of Approval</th>
<th>Merger Type</th>
<th>Overlapping Industry</th>
<th>Remedy Type</th>
<th>Duration of Behavioral Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE/Shenhua</td>
<td>11/10/11</td>
<td>Conglomerate</td>
<td>Energy</td>
<td>Behavioral</td>
<td>7 Years</td>
</tr>
<tr>
<td>Walmart/Yihaodian</td>
<td>08/13/12</td>
<td>Conglomerate</td>
<td>E-Commerce</td>
<td>Behavioral</td>
<td>4 Years</td>
</tr>
<tr>
<td>Merck/AZ Electronics</td>
<td>04/30/14</td>
<td>Conglomerate</td>
<td>Electronics</td>
<td>Behavioral</td>
<td>3 Years</td>
</tr>
<tr>
<td>Broadcom/Brocade</td>
<td>08/22/17</td>
<td>Vertical and Conglomerate</td>
<td>Semiconductor</td>
<td>Behavioral</td>
<td>10 Years</td>
</tr>
<tr>
<td>HP/Samsung</td>
<td>10/05/17</td>
<td>Horizontal and Conglomerate</td>
<td>Printer</td>
<td>Behavioral</td>
<td>5 Years</td>
</tr>
<tr>
<td>Essilor/Luxottica</td>
<td>07/25/18</td>
<td>Vertical, Horizontal and Conglomerate</td>
<td>Glasses</td>
<td>Behavioral</td>
<td>5 Years</td>
</tr>
<tr>
<td>United Technologies/Rockwell Collins</td>
<td>11/23/18</td>
<td>Horizontal and Conglomerate</td>
<td>Aviation</td>
<td>Structural and Behavioral</td>
<td>5 Years</td>
</tr>
<tr>
<td>KLA-Tencor/Orbotech</td>
<td>02/13/19</td>
<td>Vertical and Conglomerate</td>
<td>Semiconductor</td>
<td>Behavioral</td>
<td>5 Years</td>
</tr>
</tbody>
</table>
There have been five mergers that SAMR approved with conditions in the semiconductor industry. Table 2 below shows the remedies that SAMR imposed. In MediaTek/Mstar and Advanced Semiconductor Engineering/Siliconware, SAMR imposed unique hold-separate remedies. This might be interpreted as a type of hybrid of structural and behavioral remedies. In NXP/Freescale, SAMR required that the transaction could not close until the divestiture took place. We note that SAMR tends to have a less interventionist approach in the semiconductor industry, as it imposed only behavioral remedies in both Broadcom/Brocade and KLA-Tencor/Orbotech, and the duration of behavioral remedies decreased from 10 years to 5 years. It’s also encouraging to see that in Advanced Semiconductor Engineering/Siliconware, SAMR used an economic analysis in its merger review process. SAMR analyzed the correlation coefficient of the profit margins of the involved parties, and concluded that they were close competitors.

Table 2. Remedy for Conditionally Approved Mergers in the Semiconductor Industry

<table>
<thead>
<tr>
<th>Case</th>
<th>Date of Approval</th>
<th>Merger Type</th>
<th>Remedy</th>
<th>Duration of Behavioral Remedy</th>
<th>Time of Antitrust Investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MediaTek/Mstar</td>
<td>08/26/13</td>
<td>Horizontal</td>
<td>Hold Separate</td>
<td>3 Years</td>
<td>13 Months</td>
</tr>
<tr>
<td>NXP/Freescale</td>
<td>11/25/15</td>
<td>Horizontal</td>
<td>Divestiture</td>
<td>N/A</td>
<td>7.5 Months</td>
</tr>
<tr>
<td>Broadcom/Brocade</td>
<td>08/22/17</td>
<td>Vertical and Conglomerate</td>
<td>Guarantee of Interoperability, Information Firewall, No Tying or Bundling</td>
<td>10 Years</td>
<td>7 Months</td>
</tr>
<tr>
<td>ASE/SPIL</td>
<td>11/24/17</td>
<td>Horizontal</td>
<td>Hold Separate, Reasonable Transaction Terms</td>
<td>24 Months</td>
<td>15 Months</td>
</tr>
<tr>
<td>KLA-Tencor/Orbotech</td>
<td>02/13/19</td>
<td>Vertical and Conglomerate</td>
<td>Guarantee of Supply, No Tying or Bundling, Information Protection</td>
<td>5 Years</td>
<td>9.5 Months</td>
</tr>
</tbody>
</table>

Generally speaking, SAMR imposed more strict remedies on semiconductor concentrations than antitrust authorities in other jurisdictions. In MediaTek/Mstar, Taiwan’s Fair Trade Commission (“TFTC”) approved the acquisition and concluded that the merger would not hamper market competition but benefit the local economy. South Korea’s Fair Trade Commission (“KFTC”) also granted its approval but required no supply interruption for clients of both companies and no price monopoly. However, SAMR concluded that the concentration would eliminate and restrict competition in the relevant market in mainland China and imposed hold-separate remedies.

The Broadcom/Brocade transaction was conditionally approved in the EU, the U.S., and China. However, the antitrust authorities in those three jurisdictions imposed different behavioral remedies on the deal. European Commission required Broadcom to cooperate closely and in a timely manner with competing suppliers to achieve the same level of interoperability,8 while the U.S. Federal Trade Commission approved the deal with Broadcom’s commitment to establish a firewall in order not to use the sensitive confidential information of Cisco, Brocade’s only competitor in the worldwide market for fiber channel switches.9 In China, the remedies encompassed both the guarantee of interoperability and the establishment of the firewall. Furthermore, SAMR also required no tying or bundling of fiber channel switches.10

SAMR’s attitude towards ASE/SPIL (Advanced Semiconductor Engineering/Siliconware Precision Industries) was quite similar to the two transactions above. Both the Taiwan Fair Trade Commission and the U.S. Federal Trade Commission gave clearance to the merger, while SAMR conditionally approved the transactions with China’s unique hold-separate remedy, in addition to some other behavioral remedies.

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It appears that SAMR continues to be cautious with merger requests in the semiconductor industry in 2019. In *KLA-Tencor/Orbotech*, behavioral remedies were imposed in China, in contrast to unconditional approvals in all other relevant jurisdictions.

Meanwhile, China’s antitrust authority is sometimes in line with the European and U.S. authorities in merger reviews. In *NXP/Freescale*, the remedies that SAMR imposed were quite similar to those imposed by the European Commission and the KFTC, including the divestiture of NXP’s RF power business.

**IV. CONCLUSION**

The *KLA-Tencor/Orbotech* case is presumably a difficult case from SAMR’s perspective, given the large market power of KLA-Tencor in the process control equipment market. This is particularly the case due to the overwhelmingly zealous attitude of the Chinese government towards indigenous innovation in the semiconductor industry. However, we are relieved to see that antitrust economic reasoning at the bureau prevailed over anything else. The bottom line is that a competition harm theory in the case of a conglomerate merger needs to be carefully examined, not just from a technically and hypothetically feasible perspective, but also from the economic incentive and viability perspective.

We also observe from this case that SAMR appears to adopt a less interventionist approach to merger control in that it prefers using behavioral remedies instead of structural remedies. However, it’s still worthwhile to point out that the semiconductor industry, due to its sensitive nature, is still one of the focuses of SAMR’s merger reviews. China has its own unique characteristics in the wake of its industrial policies and industry development, which may be quite different from other jurisdictions such as the U.S. and the EU. Therefore, the antitrust authority’s competition concerns may, accordingly, be quite different.

With China’s increasing role and influence in the global semiconductor industry, parties that file global mergers worldwide should pay more attention to the antitrust regulatory approval process in China, prepare the merger filing with sound and rigorous economic analysis, and always be ready to address the unique competition concerns from China’s antitrust authority.
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WHY THE NEW ADMINISTRATION SHOULD BURY THE NEW MADISON APPROACH

BY MICHAEL A. CARRIER

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Why the New Administration Should Bury the New Madison Approach

By Michael A. Carrier

The “New Madison” approach sounds so promising. Old but new. Updating the classics for the modern era. What could be bad? In a word: everything. The intersection of patent and antitrust law has a long pedigree. For decades, antitrust’s role in patent-based activity has been acknowledged. Patent licenses are subject to antitrust scrutiny. “Pay for delay” settlements are not entitled to antitrust immunity. And activity in the context of standard setting organizations (“SSOs”) could conceivably violate antitrust law. That history has recently come under attack. Between 2017 and 2020, the head of the Department of Justice’s Antitrust Division, Makan Delrahim, introduced a radical framework — the “New Madison” approach — that extricated patent-based conduct from antitrust scrutiny. Such a gambit diverged from the longstanding bipartisan approach that had recognized antitrust’s role in policing standards-based conduct. This essay introduces standards and then addresses five tenets of Delrahim’s approach. For each, it presents the argument and then discusses its flaws.
I. INTRODUCTION

The “New Madison” approach sounds so promising. Old but new. Updating the classics for the modern era. What could be bad?

In a word: everything. The intersection of patent and antitrust law has a long pedigree. For decades, antitrust’s role in patent-based activity has been acknowledged. Patent licenses are subject to antitrust scrutiny. “Pay for delay” settlements are not entitled to antitrust immunity. And activity in the context of standard setting organizations (“SSOs”) could conceivably violate antitrust law.

That history has recently come under attack. Between 2017 and 2020, the head of the Department of Justice’s Antitrust Division, Makan Delrahim, introduced a radical framework — the “New Madison” approach — that extricated patent-based conduct from antitrust scrutiny. Such a gambit diverged from the longstanding bipartisan approach that had recognized antitrust’s role in policing standards-based conduct.

This essay introduces standards and then addresses five tenets of Delrahim’s approach. For each, it presents the argument and then discusses its flaws.

II. STANDARDS

A standard is a common platform that allows products to work together. Standards are ubiquitous in our economy. They allow us to speak to and understand one another. They let consumers access credit card and ATM machines. They underlie phone and wireless networks. They permit computer users to share videos. They appear in countless other settings.

Standards are crucial to our economy. They are especially needed in network effects markets, in which users benefit from an increase in the number of other users in the system. A social network or e-mail system, for example, becomes more valuable as more users connect to it. Networks also feature positive feedback. The more popular a computer operating system becomes, the more applications will be written for it.

Even though standards are vital, antitrust traditionally viewed the process of setting standards with suspicion. SSOs tend to be composed of industry rivals discussing sensitive information such as price. As Adam Smith worried: “People of the same trade usually get into combinations of one kind or another, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices.”

Despite antitrust’s concern, competitors have good reason to engage in such discussions. Before the selection of a standard, an SSO often can choose from an array of alternative technologies. After the SSO chooses a standard, however, the owner of the selected technology may gain significant power. If the technology is patented, the owner (in what is known as “patent holdup”) could impose excessive licensing terms that reflect not just the value of the patent but also the significant costs of switching to a new technology. In many cases, the royalties are passed on to consumers, who are forced to pay higher prices.

Nor can SSO members, faced with demands for excessively high royalties, migrate easily to a different technology. After a standard is selected, industry participants begin designing, testing, and producing goods that conform to the standard. That, as former FTC Chair Deborah Platt Majoras explained, is “the whole idea of engaging in standard setting.” But these efforts, in learning about a particular technology and investing in equipment and complementary products, typically do not have value if the user switches to an alternative technology. As a result of these costs (as well as the costs of selecting a new standard), the industry will be locked into the chosen standard.


3 In certain settings, there may be only one superior technical option.


5 Majoras, supra note 3, at 3.

6 Daniel G. Swanson & William J. Baumol, Reasonable and Nondiscriminatory (RAND) Royalties, Standards Selection, and Control of Market Power, 73 Antitrust L. J. 1, 9 (2005); Farrell et al., 74 Antitrust L. J. at 612 n.35.
This threat of holdup explains why SSOs have required members to provide certain information or make certain promises before the standard’s selection. Some SSOs have mandated that participants disclose patents that could be implicated by the standard. Many have required members to agree to license their IP on fair, reasonable, and nondiscriminatory (“FRAND”) terms. Antitrust law traditionally has been suspicious of such price-related activities, which deters SSO members from sharing information that could prevent holdup. But any information a patent holder provides before the SSO adopts a technology involving its patents promises to be useful. And that is why in the past several decades, the antitrust agencies have challenged various types of patent-related behavior in the standard-setting context.7

The anticompetitive harms from patent holdup also have been consistently acknowledged by officials in Republican and Democratic administrations. The unanimously adopted 2007 joint report of the Department of Justice and Federal Trade Commission explained the difference between a patentee’s power ex ante (when “multiple technologies may compete to be incorporated into the standard”) and ex post (when “the chosen technology may lack effective substitutes precisely because the SSO chose it as the standard”), with this disparity allowing the patentee to “extract higher royalties or other licensing terms that reflect the absence of competitive alternatives.”8 The FTC also unanimously endorsed a 2011 Report that highlighted how “an entire industry” could be “susceptible” to the “particularly acute” concern of holdup, which can result in “higher prices” and “discourage standard setting activities and collaboration, which can delay innovation.”9

In a radical reversal, Makan Delrahim cast aside this bipartisan treatment. His approach consisted of five pillars, based on patents’ (1) absolute right to exclude and (2) automatic right to injunctive relief, together with (3) an emphasis on “holdout” rather than holdup, (4) skepticism about the need for antitrust, and (5) a restricted conception of innovation.

III. NEW MADISON APPROACH

The first pillar of Delrahim’s approach centered on the “core of what it means to hold an IP right — namely, the right to exclude.”10 Patents are “a form of property, and the right to exclude is one of the most fundamental bargaining rights a property owner possesses.”11 Patent rights “function best if an owner retains a right to exclude,” and “[d]eprieving a patent holder of this right would skew the bargain away from the free-market incentive scheme the Constitution and Congress have established.”12

Delrahim turned for support to the Constitution’s text, which provides that “Congress shall have the Power . . . to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”13 He asserted that “the authors of the Constitution not only used the word ‘right,’ but . . . also preceded it with the equally important word ‘exclu-

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8 U.S.DEP’T OF JUSTICE & FTC, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 35-36 (2007); see also id. at 37-38 (quoting witness who stated that holdup results in “either [not mak[ing] the standard you acceded to [or] blackmail”).


11 Assistant Attorney General Makan Delrahim Delivers Remarks at the USC Gould School of Law’s Center for Transnational Law and Business Conference, Nov. 10, 2017 [USC speech].


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sive.”14 And he stated that patent law “offer[s] incentives for holders of valid patents to seek the greatest rewards possible for their inventions.”15 In underscoring the importance of absolute exclusionary rights and ignoring the utilitarian justification that links these rights with societal welfare, Delrahim’s position implicated a natural rights justification for property.

Delrahim’s second pillar centered on injunctions. A patentee’s ability to obtain an injunction against infringement “gives it necessary leverage in a free market negotiation.”16 The “right to seek an injunction” is “enshrined in the Constitution as a foundation of free market negotiations for patented inventions.”17 Understanding “patent rights, once conferred, as a form of property right helps frame the current debate over injunctions, and demonstrates how far we’ve strayed off course.”18 In other words, “a violation by a patent holder of an SSO rule that restricts a patent-holder’s right to seek injunctive relief should be appropriately the subject of a contract or fraud action and rarely if ever should be an antitrust violation.”19

Third, Delrahim claimed that the notion of patent holdup is overblown. He stated that “in recent years, competition policy has focused too heavily on the so-called unilateral hold-up problem, often ignoring what fuels dynamic innovation and efficiency.”20 In fact, he lamented that “[e] very incremental shift in bargaining leverage toward implementers of new technologies acting in concert can undermine incentives to innovate.”21

Delrahim worried that “[t]oo often lost in the debate over the hold-up problem is recognition of a more serious risk: the hold-out problem.”22 He warned that “implementers threaten to under-invest in the implementation of a standard . . . until their royalty demands are met.”23 This problem is “a more serious impediment to innovation” because (in contrast to implementers, some of whose investments “occur after royalty rates for new technology could have been determined”), innovators “make an investment before they know whether that investment will ever pay off.”24

Fourth, Delrahim disclaimed a role for antitrust. He stated that “patent hold-up is not an antitrust problem”25 and that “a unilateral refusal to license a valid patent should be per se legal.”26 A patent holder “cannot violate the antitrust laws by properly exercising the rights patents confer, such as seeking an injunction or refusing to license such a patent.”27 Nor should a “unilateral violation of a FRAND commitment . . . give rise to a cause of action under Section 2 of the Sherman Act, even if a patent holder is alleged to have misled or deceived a standard-setting organization with respect to its licensing intentions.”28 The reason is that “[a]pplying Section 2 to this sort of unilateral conduct would contravene the underlying policies of the antitrust laws.”29

14 Id.
16 Ottawa speech, supra note 12.
17 Id.
18 Penn speech, supra note 10.
19 USC speech, supra note 11.
20 Id.
21 Id.
22 USC speech, supra note 11.
23 Id.
24 Id.
25 Penn speech, supra note 10.
26 USC speech, supra note 11; see also Penn speech, supra note 10.
27 USC speech, supra note 11.
28 San Francisco speech, supra note 15.
29 Id.
The fact that "a patent holder can derive higher licensing fees through hold-up simply reflects basic commercial reality," and "[c]ondemning this practice... as an antitrust violation, while ignoring equal incentives of implementers to ‘hold out,’ risks creating ‘false positive’ errors of over-enforcement that would discourage valuable innovation."

A monopolization cause of action "would skew the patent licensing bargain away from the bargaining outcome that a free market dictates." It "would be a mistake to infer that a contractual FRAND commitment somehow establishes a duty under the antitrust laws to license on terms demanded by a licensee or that violations of an ambiguous FRAND term become an antitrust violation." And even deception to an SSO "is not the sort of market-power-enhancing conduct that Section 2 should reach because a cause of action for treble damages would impede the policies underlying the Sherman Act."

Fifth, Delrahim minimized antitrust’s role based on his conception of innovation. He stated that “[a]n antitrust duty to license on FRAND terms would... contravene the patent laws’ policy of promoting innovation by offering incentives for holders of valid patents to seek the greatest rewards possible for their inventions.” Similarly, he "worry[ed]" that "enforcers have strayed too far in the direction of accommodating the concerns of technology implementers who participate in standard setting bodies, and perhaps risk undermining incentives for IP creators, who are entitled to an appropriate reward for developing breakthrough technologies." And he lamented that "misapplication of the antitrust laws threatens to disrupt the free-market bargain, which could undermine the process of dynamic innovation."

Delrahim additionally worried that "in recent years, competition policy has focused too heavily" on holdup, "often ignoring what fuels dynamic innovation and efficiency." He viewed "[e]very incremental shift in bargaining leverage toward implementers of new technologies acting in concert" as potentially "undermin[ing] incentives to innovate." And as a result, he "view[ed] policy proposals with a one-sided focus on the hold-up issue with great skepticism because they can pose a serious threat to the innovative process."

IV. NEW MADISON CRITIQUE

While at DOJ, Delrahim offered an aggressive reformulation of the relationship between patent and antitrust law. But that radical rethink was matched by a lack of support. In particular, each of his five pillars is hobbled by flaws.

First, the right to exclude is not sacrosanct. As I have shown elsewhere, property owners do not have absolute rights to exclude. There are at least 50 doctrines (such as adverse possession, easements, eminent domain, nuisance, and zoning) that limit property owners’ rights. Just to pick one example, landowners cannot exclude others from entering their land to save lives or property or to avoid some other serious harm.

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30 Penn speech, supra note 10.
31 San Francisco speech, supra note 15.
32 Id.
33 Id.; see also Penn speech, supra note 10: (“I worry that courts and enforcers have overly indulged theories of patent holdup as a supposed competition problem, while losing sight of the basic policies of antitrust law.”).
34 San Francisco speech, supra note 15.
35 USC speech, supra note 11.
36 Id.
37 Id.
38 Id.
39 Id.
41 Id.
Delrahim’s discussion of exclusive rights granted to patentees as a type of natural property rights also ignores the uncontroversial utilitarian framework for the patent grant. The Supreme Court has long made clear the primacy of the utilitarian justification. Half a century ago, for example, the Court in *Graham v. John Deere* explained that “[t]he patent monopoly was not designed to secure to the inventor his natural right in his discoveries,” but instead was “a reward, an inducement, to bring forth new knowledge” and was to be granted only to “inventions and discoveries which furthered human knowledge.”

Exclusive rights exist not to bestow on patentees a moral right to a reward but to promote the best interests of society. That is why patents, like other forms of intellectual property, are subject to doctrines (like novelty, nonobviousness, the written description and enablement disclosure requirements, and a limited 20-year term) that ensure that protections for market competition balance patents’ incentive effects. Relatedly, it tells only half the story to focus on the incentive relevant to the initial invention while ignoring follow-on innovation, which is just as important and may be significantly undermined when patent owners abuse their FRAND obligations.

A focus on exclusionary natural rights also is inconsistent with Supreme Court rulings. In upholding the Patent Office’s *inter partes review* process for administratively reconsidering patents, the Court made clear that “[p]atents convey only a specific form of property right — a public franchise.” In *FTC v. Actavis*, the Court explained that antitrust has a role to play within the scope of the patent, as it would be “incongruous” to “determine antitrust legality by measuring [a] settlement’s anticompetitive effects solely against patent law policy, rather than by measuring them against procompetitive antitrust policies as well.” And in *Lear v. Adkins*, the Court eliminated the doctrine of licensee estoppel, finding that a licensee could challenge patent validity even after licensing the patent.

Second, the position that patent infringement automatically leads to an injunction is, for good reason, no longer the law. More than a decade ago, the Supreme Court ruled unequivocally that courts must decide whether to grant injunctions “consistent with traditional principles of equity, in patent disputes no less than in other cases.” To similar effect, the patent statute provides that courts “may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.” In fact, the Federal Circuit, not historically associated with insufficient protection of patent rights, has made clear that the framework the Supreme Court set forth in *eBay v. MercExchange* “provides ample strength and flexibility for addressing the unique aspect of FRAND committed patents and industry standards in general.” Because there could be thousands of patents in a product today, it is not appropriate to uniformly apply standards from the 18th century, when there were so few patents in a product that “if you put technology in a bag and shook it, it would make some noise.”

In his rush to criticize every position that did not blindly accept an unadorned right to an injunction in every case, Delrahim inaccurately portrayed reasonable statements. For example, Delrahim withdrew from a 2013 statement jointly issued by the DOJ and U.S. Patent and Trademark Office (“PTO”) that acknowledged that “[i]n some circumstances, the remedy of an injunction or exclusion order may be inconsistent with the public interest” but also recognized that an exclusion order “may still be an appropriate remedy,” such as when “the putative licensee is unable or refuses to take” a FRAND license. The statement even found injunctions appropriate for “a constructive refusal to negotiate,” which occurs when an implementer “insist[s] on terms clearly outside the bounds of what could reasonably be considered” to be FRAND terms “in an
attempt to evade the putative licensee’s obligation to fairly compensate the patent holder.”52 The statement was so reasonable that the Federal Circuit relied on it to explain why injunctions are warranted when it overturned a district court that had “applied a per se rule that injunctions are unavailable for SEPs” and delineating when “an injunction may be justified.”53

Third, the holdup problem has been recognized by courts and standard setting organizations themselves as a real problem.54 As one court stated, patent holdup is not a theoretical concern, but instead “is a substantial problem that [F]RAND is designed to prevent.”55 And a second court rejected the argument that “holdup does not exist in the real world,” finding that such an argument “does not trump the evidence . . . that holdup took place in this case.”56

Similarly, former FTC Commissioner Terrell McSweeney pointed to “ample evidence” of patent holdup, including FTC enforcement actions, panelists’ acknowledgement of the problem, “strong anecdotal support,” and courts’ conclusions that patentees “demand[ed] far more than that to which they were entitled,” with courts in two cases awarding only 1/150 and 1/500 of the royalties sought.57 The fact that SSOs — those with the most knowledge of the issues — adopt FRAND policies is itself telling proof that holdup is a problem. Otherwise, it is unclear why they would adopt policies to prevent holdup.58

Finally, holdup presents a more serious antitrust concern than holdout. Implementers that suffer holdup because of sunk investments in a technology are vulnerable to paying supra-competitive royalties based on the entire value of the product, as opposed to the value of the patented technology.59 In contrast, the risks faced by patent holders who complain about licensees “holding out” are consistent with the situation facing “anyone . . . that makes a speculative investment, whether in technology, real estate, corporate securities, or any other industry.”60

To be sure, coordinated action between licensees could implicate antitrust law, but these concerns are not presented in licensing disputes at the core of holdout. Both licensors and licensees can engage in holdout, merely by “refus[ing] to perform in good faith or negotiate reasonably.”61 In contrast, the holdup problem, and accompanying lock-in binding implementers, exist on only one side of the exchange.

Fourth, patentees that obtain or maintain monopoly power as a result of breaching a FRAND commitment present a straightforward monopolization case.62 FRAND breaches could satisfy the elements of monopolization, in particular, the requirement that a plaintiff demonstrate exclusionary conduct by showing an exclusion of competitors (the exclusion of rival competitive technologies not chosen by the SSO) that results in competitive injury (price increases and innovation harms from the breach) and acquisition or maintenance of monopoly power (obtained through the breach). In addition, antitrust liability does not take aim only at a patentee’s right to exclude but instead is on the table because of the voluntary commitment to license on FRAND terms.

52 Id.
54 For a discussion of the bipartisan recognition of the anticompetitive harms from patent holdup, see supra notes 7-8 and accompanying text.
57 Commissioner McSweeney, supra note 9, at 4.
60 Id.; see also id. (“Requiring that buyers guarantee an adequate return to those who make speculative investments would be antithetical to the operation of the market system and would badly distort investment incentives.”).
61 Muris, supra note 58, at 9.
Moreover, the conduct here is not immune from the application of antitrust law. Parties filing petitions with government agencies often can claim antitrust immunity based on the Noerr-Pennington doctrine, as “[t]hose who petition [the] government for redress are generally immune from antitrust liability.” But the “absolutist position” that the Noerr doctrine “immunizes every concerted effort that is genuinely intended to influence governmental action” would allow parties to violate the antitrust laws, for example by being “free to enter into horizontal price agreements.” A breach of a FRAND promise is “distinguish[able] from Noerr and its progeny” because it is “the type of commercial activity that has traditionally had its validity determined by the antitrust laws themselves.”

Fifth, a problem with linking innovation to only the initial patentee’s contribution is that it ignores the advances contributed by implementers that incorporate the patented invention into their products. As industry organizations have explained, “the assumption that only the upstream inventions that are contributed to standard-setting activities merit protection is . . . incorrect.” The reason is that “[a] product can contain a multitude of technological innovations separate and apart from a given SEP.” Each of these technologies “provide[s] benefits to end users that are independent of the cellular technology that enables telephony connections” and that could be patented.

One prominent example of this observation is the smartphone, which includes “an advanced microprocessor, a sophisticated graphics processor, flash memory, [dynamic random-access memory] DRAM, location awareness technology, touch technology, voice recognition, high-definition still and video cameras, video and music replay, power management technology, and an advanced operating system.”

In fact, “[t]he patent laws are intended to limit, not maximize, the royalties to which patent holders are entitled.” In particular, the patent statute limits a patentee’s infringement remedies to compensatory damages not less than a “reasonable royalty” and enhanced damages up to a specified maximum. Many cases have limited the amounts a patentee can recover, with William Lee and Doug Melamed pointing out that “courts generally show concern about overcompensating standard-essential patent holders.”

In short, each of the pillars on which Delrahim relies is hobbled by significant flaws.

V. CONCLUSION

The New Madison approach was not faithful to a longstanding bipartisan recognition of antitrust’s importance for patent-related conduct. Relocating Makan Delrahim’s outside-the-mainstream principles to the dustbin of history would do much to foster innovation and a reasonable approach to patents, antitrust, and standards.

65 Id. at 505; see also FTC v. Superior Court Trial Lawyers Ass’n, 493 U.S. 411, 424-25 (1990).
67 Id.
68 Id.
69 Id. at 24.
70 Id.
71 Melamed & Shapiro, supra note 58, at 2121.
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The Current State of SEP Litigation in China

BY FEI DENG, SHAN JIAO, AND GUANBIN XIE

The past decade has witnessed an increase in Standard Essential Patent (SEP) litigation around the world. Among jurisdictions, China has attracted significant attention arising from the battles over anti-suit injunctions (ASI) and anti-anti-suit injunctions (AASI) between Chinese courts and courts in other jurisdictions, in *Xiaomi v. Inter-Digital* and *Samsung v. Ericsson.*

There perhaps will be more companies bringing, or being dragged into, SEP litigation in China. This article provides an overview of the lay of the land for SEP litigation in China.

Legislative Background of SEP Litigation in China

Because China is a civil law system, there are two types of sources that are binding on Chinese courts and can be cited by judges in their decisions: the laws are one type, and the other type is the judicial interpretations issued by China’s Supreme People’s Court (SPC).

The main Chinese laws relevant to SEP litigation are:

1. the Contract Law of the People’s Republic of China;
2. the Patent Law of the People’s Republic of China;
3. the Anti-Monopoly Law of the People’s Republic of China; and
4. the Standardization Law of the People’s Republic of China.

As mentioned above, the SPC may issue judicial interpretations, which have the same legal force as statutes and are binding on all Chinese courts. There has not been an SEP-specific judicial interpretation yet, but the more general Supreme People’s Court’s Interpretations Concerning Certain Issues on Application of Law for Trial of Cases on Disputes over Patent Infringement (II), contains two articles relevant to SEP litigation—Article 24.2 sets the basic principle for granting injunction for SEPs, and Article 24.3 confirms the judicial practice of rate-setting cases being filed before the Chinese courts.2

A High People’s Court may issue guidelines that provide guidance to lower courts within that particular province. However, a guideline is not a formal source of law. Guidelines issued by a high court in a particular province are not legally binding even to the courts within that specific province, and such guidelines cannot be cited by judges as a source of law in their decisions. Regardless, in practice, courts within the specific province would follow the guidelines issued by the respective high court, without citing to the guidelines. Examples of such guidelines related to SEPs include the Beijing High People’s Court’s Guidelines for Patent Infringement Determination (2017) issued in April 2017, in which Articles 149–153 are specific to SEPs; and the Guangdong High People’s Court’s Work Guidelines on Adjudicating Cases of Disputes over Standard Essential Patents (Trial), issued in April 2018.

The Anti-Monopoly Commission under the State Council, the competition policy-making authority of the central government, which has merged into the Anti-Monopoly Bureau of China’s State Administration for Market Regulation (SAMR), also issued “guidelines” related to SEPs in September 2020, namely the Anti-Monopoly Guidelines for the Field of Intellectual Property Rights. Guidelines issued by the State Council provide guidance for antitrust authorities at central and local levels. But they are merely referential, and not binding on courts.

Procedural Background of SEP Litigation in China

Chinese courts have routinely heard SEP-related cases. Generally speaking, there are three major types of SEP cases in China:

1. Patent infringement cases where a patentee may seek damages and/or injunctive relief or potential licensees may seek a declaration of non-infringement;
2. Anti-monopoly civil actions where the issues usually arise from excessive pricing, bundling, discriminatory treatment, etc.; and
3. Rate-setting cases where either patentee or implementer may ask the court to adjudicate FRAND licensing terms (including royalty rate) effective within China or on a global basis.

Regardless of the case type, SEP-related cases are almost all heard by an IP tribunal within a court or by specialized IP courts. These cases all follow similar procedural steps. The flowchart below—the steps of which are explained in the text following the chart—provides an overview of the entire life cycle of a civil litigation in China, including those related to SEPs.
Note this flowchart does not cover the patent invalidation procedure, which is a separate proceeding routinely conducted in parallel with the patent infringement action. Normally the potential licensee must first file for invalidation before the Intellectual Property Protection Department (previously, Patent Reexamination Board (PRB) of the China National Intellectual Property Administration (CNIPA)).

Simply put, one cannot go directly to a Chinese court to file for patent invalidation, but one must go to the CNIPA. After the CNIPA issues an invalidation decision, either party may file for a judicial review of the invalidation decision by the Beijing IP Court, and may further file for appeal against the Beijing IP Court’s 1st instance judgment to the SPC.

Below we provide a more detailed description of each step of the flowchart in the context of SEP litigation. In addition, it is worth noting that an ASI may occur during any step of the flowchart.

**Case Filing and Case Acceptance**. When a plaintiff files a complaint with a Chinese court, it does not necessarily mean the court has formally accepted and instituted the case. The court may have a seven-day review period to decide whether the complaint satisfies the statutory requirements and finally institutes the case.

**Service upon Defendants**. For Chinese defendants, the Chinese courts usually will serve them via express mail, which should take no longer than three days to serve. For cases involving non-Chinese parties, Chinese courts may use a variety of methods to serve parties who do not have domicile in the territory of China, including but not limited to service by convention, diplomatic service, service by mail, service by fax or email, and service by public announcement. Traditionally, Chinese courts used the service procedure under the Hague Convention, which takes up to 7 to 12 months in practice, but nowadays Chinese courts are exploring quicker alternative service methods. For example, last year, in OPPO v. Sharp, the Shenzhen Intermediate Court served Sharp, a Japanese company, via the postal channel, which took only about one week.

**Jurisdiction**. The court system in China consists of the Basic People’s Court, the Intermediate People’s Court, the High People’s Court, and the SPC, in ascending order of hierarchy. China has a relatively centralized jurisdiction over technology-related intellectual property cases and antitrust monopoly cases. The court of first instance for SEP cases is the Intermediate People’s Courts at the location of the capital city of provinces, autonomous regions and municipalities, and Intermediate People’s Courts designated by the SPC, as well as Beijing, Shanghai, and Guangzhou IP Courts, unless the amount of claimed damages is above five billion RMB, in which event the case should be filed with a High People’s Court.

On January 1, 2019, the SPC established within itself a new tribunal—the Intellectual Property Tribunal—which from then on handles all second instance appeals of all antitrust cases and most IP cases, including all SEP cases. If an Intermediate People’s Court issues a first instance judgment, the judgment does not take effect immediately, and any party may, within the appeal period, appeal to the IP Tribunal of the SPC, which will conduct a full hearing on the determination of facts, application of law, and procedural issues of the case and issue a second instance judgment. Previously, the appeal for SEP cases tried by the intermediate courts went to the high courts, but after the establishment of the IP Tribunal of the SPC, all appeals are adjudicated by the IP Tribunal of the SPC, which helps unify the legal standard for all SEP cases at the stage of appeal.

“JO” in the flowchart refers to the jurisdictional objection proceeding, which is an option to be exercised by defendant(s). In most, if not all, SEP cases, defendants will choose to file for JO as a delaying tactic. Once filed, the trial and appeal of the JO may take six months to one year, when defendants may better prepare evidence and their litigation strategy. The chance of winning a JO is low, but it is almost a routine step taken by defendants in civil litigation, given the otherwise fast-moving pace of Chinese litigation proceedings.

**Hearing**. A court panel in China consists of an odd number of judges. Usually it is three, but in many high-profile
SEP cases, the number may be five. For technical cases such as SEP cases, there usually will be one or two technical investigators present at the hearings, who are appointed professionals with in-depth knowledge about technical issues relevant to the case, to assist the judges to clarify technical issues in findings of infringement. For example, some technical investigators are seconded from the CNIPA, which means their former day job was to review patent applications or patent invalidation petitions. Technical investigators can be very helpful in practice. However, as a matter of legal standing, technical investigators are not part of the panel and do not have decision-making power over the result.

There can be several pre-trial hearings, with each hearing spanning roughly a day to a week, during which the judges would go through the complaint, response, and evidence within the scope. We focused our study on the mobile telecommunications industry, which has seen the most SEP litigation not only in China, but also worldwide.

We identified 133 SEP cases accepted by the Chinese courts in the mobile telecommunications industry between 2011 and 2020. It should be noted that in China’s litigation system, when a patent owner sues the same defendant for infringing more than one patent, multiple case numbers are assigned, one for each patent. Also, when a matter involving the same plaintiff and the defendant has several different causes of action—for example, an assertion of abuse of dominance and a request for a FRAND rate determination—multiple case numbers are also assigned, one for each cause of action. To count the “non-duplicative” cases, we grouped cases with the same parties into a “set of cases,” although they have different case numbers. Based on this measure, the 133 cases are grouped into 46 sets of cases. Below are key summary statistics and characteristics we have drawn from these cases:

- How Many Cases Were Filed Each Year? As indicated in Chart 2, there seems to have been an explosion in the number of cases in 2016 and 2018, but the number of sets of cases grew more slowly. Thus, the “explosion” in cases in 2016 and 2018 seems to be mostly due to the same parties filing cases on multiple patents, as in cases such as Qualcomm v. Meizu in 2016; ACT v. Xiaomi, ACT v. OPPO, and ACT v. Vivo in 2018.

- What Were the Main Causes of Actions? Of the 133 cases, 108 (81%) were filed as patent infringement actions, 16 (12%) were filed as disputes over FRAND licensing terms, and 8 (6%) were filed as anti-monopoly actions. Only one case, TCL v. Ericsson, was filed as an unfair competition action. As described earlier, a plaintiff can file multiple cases simultaneously under different causes of action, such as in Qualcomm v. Meizu.

- Which First-Instance Courts Were the Most Popular? The Beijing Intellectual Property Court, the Shanghai Intellectual Property Court, and the Shenzhen Intermediate People’s Court were the top three courts—together they handled over 70 percent of first-instance SEP case filings during the past decade. More recently, the Nanjing Intermediate People’s Court in Jiangsu Province and the Wuhan Intermediate People’s Court in Hubei Province are also becoming “hot spots” for SEP case filings.

- Which Companies Were Bringing or Defending SEP Cases in China? The case filings are highly concentrated, with the top five plaintiffs, namely Huawei, Royal KPN, Siemens, ZTE, and Advanced Codec Technologies (ACT) accounting for about half of the total number of sets of cases. Defendants are less concentrated, with the top five defendants, namely Xiaomi, InterDigital, Apple, HTC, and Ericsson accounting for about one-third of the total number of sets of cases.

Summary Statistics and Characteristics of Mobile Telecommunications SEP Litigation in China over the Past Decade

To provide an overview of the state of SEP litigation in China, we have gathered information on all publicly reported SEP litigation cases in the mobile telecommunications industry accepted by the Chinese courts between 2011 and 2020. Although most rulings and decisions are published in China, litigation filings themselves are not. Therefore, to limit the scope of this study so as to maximize coverage within the scope, we focused our study on the mobile telecommunications industry, which has seen the most SEP litigation not only in China, but also worldwide.
What Is the Nationality of Companies Suing and Being Sued? As indicated in Chart 3, if one looks at the number of cases, it may seem that more cases involve foreign entities suing Chinese entities than the other way around. However, when looking at the number of sets of cases, this asymmetry is substantially smaller—20 sets of cases (43% of total) involve foreign plaintiffs suing Chinese defendants while 17 sets (37% of total) involve Chinese plaintiffs and foreign defendants. This indicates that the asymmetry in cases is mostly due to foreign plaintiffs litigating more patents on average than Chinese plaintiffs.
Did the Chinese Litigation Serve as the Opening Attack or as a Response? It is not surprising that in the global SEP dispute environment not all litigations were first filed in China. In about one-fourth of the cases involving at least one foreign party, and two-fifths of the sets of cases, the parties had already been engaged in litigation in other countries before the Chinese litigation was filed. As a recent example, in January 2020, Sharp filed a patent infringement lawsuit against OPPO in Japan related to WLAN.\(^20\) As a response, in February 2020, OPPO filed a lawsuit against Sharp in the Shenzhen Intermediate People’s Court, seeking damages as well as a FRAND rate determination over Sharp’s 3G, 4G, and WLAN SEPs.\(^21\)

Key Issues in Published Mobile Telecommunications SEP Decisions

Among the 133 SEP cases (46 sets of cases) litigated in China in the mobile telecommunications industry over the past decade, a court judgment has been issued in 12 cases (8 sets of cases). Most of the other cases were withdrawn or dismissed before any judgment was issued.

In this section, we provide a summary of the key findings in these judgments on issues such as the determination of the FRAND royalty rate and whether an injunction should be granted. In addition, we discuss the recent cases where the Chinese courts have issued rulings concerning global rate setting and ASIs.

**Determination of the FRAND Royalty Rate for Chinese SEPs.** Generally speaking, there are three commonly used approaches to calculate FRAND royalty rate: (1) benchmarking the royalty based on comparable licenses (“comparable license approach”); (2) apportioning an appropriately defined aggregate royalty burden (“ARB”) of the entire standard to the SEP(s)-in-suit (“top-down approach”); (3) calculating the incremental economic benefit of the SEP(s)-in-suit versus next-best non-infringing alternative(s) (“bottom-up approach”).\(^22\)

There have been four cases in which the Chinese courts have issued a judgment that delves into the issue of how a FRAND royalty rate should be determined for Chinese SEPs.

**Huawei v. InterDigital:**\(^23\) The earliest FRAND rate decision in China, *Huawei v. InterDigital*, was issued by the Shenzhen Intermediate Court in February 2013 and upheld by the Guangdong High Court later that year. Although both the lower court and the appeals court decisions were vacated in December 2018 by the Supreme People’s Court at the parties’ request, they are still worth looking at, given that this set of decisions set precedent for FRAND rate determination in China.\(^23\) Based on rates derived from lump-sum payment licenses InterDigital signed with Apple in 2007 and with Samsung in 2009, the courts calculated that the FRAND royalties to be paid by Huawei for InterDigital’s 2G, 3G, and 4G essential Chinese patents should not exceed 0.019% of the sales prices of Huawei’s relevant products.

**Huawei v. Samsung:**\(^25\) The Shenzhen Intermediate Court ruled in January 2018 that Huawei had abided by its FRAND obligations while Samsung had not during the parties’ cross-licensing negotiation and issued an injunction against Samsung. Although this was an injunction case rather than a FRAND rate-setting case, the court evaluated whether the cross-license rates offered by both parties were FRAND. In its evaluation, the court adopted a top-down method, setting the ARB as 5% for 3G and 6%–8% for 4G, according to statements major SEP holders made at around the time the standards were set, and apportioned these ARBs to Huawei’s and Samsung’s 3G and 4G portfolios based on the relative strengths of Huawei’s and Samsung’s portfolios. In evaluating Huawei’s and Samsung’s respective portfolio strengths, the court relied on indicators including the size and essentiality ratio of the parties’ SEPs, the number of proposals that the party submitted and were adopted during the standard-setting process, and the percentage of challenged patents that were found to be valid.

**Iwncomm v. Sony:**\(^26\) The Beijing IP Court issued a judgment in March 2017, which was later upheld by the Beijing High Court, awarding Iwncomm, a Chinese network technology company, 8.6 million RMB (around USD$1.3 million) in damages and an injunction against Sony, for infringement of an SEP essential to WAPI, a Chinese national standard for wireless communications. The FRAND rate for the patent-in-suit was determined to be one RMB (around USD$0.14) per unit based on four Iwncomm licenses containing the same rate, albeit for Iwncomm’s entire WAPI portfolio. The total damage award was trebled after multiplying the FRAND rate by the infringing products’ sales, based on factors such as the defendant’s “fault” during the licensing negotiation.

**Huawei v. Conversant:**\(^27\) The Nanjing Intermediate Court issued a FRAND rate decision in September 2019, determining that the FRAND rates for Conversant’s Chinese SEPs are 0.00225% for Huawei’s single-mode 4G handsets and 0.0018% for Huawei’s multi-mode (2G/3G/4G) handsets. In arriving at these results, the court adopted Huawei’s proposed top-down methodology, first adjusting the worldwide ARBs to discounted “China ARBs” for each standard, and then apportioning the “China ARBs” to Conversant’s Chinese SEP portfolio based on the number of SEPs in the portfolio relative to the total number of SEPs in China, after essentiality evaluation. The court did not adopt Conversant’s proposal of using the FRAND rate determined in *Unwired Planet v.*
Huawei, adjudicated by a UK court, as a benchmark, due to the benchmark being insufficiently adjusted for the potential difference in the value and essentiality ratio between Unwired Planet’s portfolio and Conversant’s portfolio.

Based on these four decisions, it can be observed that the Chinese courts have adopted both the top-down and comparable license approaches when calculating FRAND rates. None of the decisions adopted the bottom-up approach, but this seems to be due to the parties not presenting a bottom-up analysis. It can also be observed that the Chinese courts have now fully embraced the top-down approach for 2G/3G/4G standards, with the ARB based on certain SEP owners’ statements, as demonstrated in Huawei v. Samsung and Huawei v. Conversant. For the comparable license approach, it seems that in cases such as Huawei v. Samsung and Huawei v. Conversant, parties may not have submitted actual licenses but rather attempted to rely on the FRAND rates for other portfolios set in other litigation matters. However, these attempts were in each case rejected by the Chinese courts on the basis of comparability. When parties did submit evidence of actual licenses, such as in Iwuncomm v. Sony, or public information on existing licenses, such as in Huawei v. InterDigital, the Chinese courts have relied upon them in calculating the FRAND rate.

Global Rate Setting. Although no such judgment has been issued yet, there have been several rulings recently that indicate the Chinese courts are going to determine the global FRAND royalty rates for SEPs in some cases. As mentioned above, the Supreme Peoples’ Court confirms the judicial practice of rate-setting cases being filed before the Chinese courts when the negotiation fails after “sufficient negotiation.” Standard Essential Patents Licensing Dispute is an independent cause of action in China, which can be filed either by the patent holder or the potential licensee. Such a cause of action does not necessarily connect with any infringement action or declaration of non-infringement action. In the past, precedents filed under the cause of action of SEP Licensing Dispute were limited to Chinese patents only, regardless of whether the negotiation was global in nature. However, in recent cases, quite a few cases were filed under the cause of action of SEP Licensing Dispute for setting the FRAND global rate.

For example, in December 2020, the Shenzhen Intermediate Court ruled in OPPO v. Sharp that it will determine the global FRAND rate and other licensing terms for Sharp’s 3G, 4G, and WLAN SEPs. Despite the jurisdictional objection filed by Sharp, for the first time, a Chinese court expressed the willingness in a ruling to determine the global FRAND royalty rates. The Shenzhen court states in its ruling that it “believes that the determination of global royalty rates by the court can facilitate the overall effectiveness, fundamentally resolve the disputes between two parties, avoid the repeated litigation in different countries and therefore is in accordance with the FRAND principle.” In addition, the Wuhan Intermediate Court accepted a lawsuit filed by Xiaomi against InterDigital related to determination of the global FRAND rate and stated in its ruling that “adjudication of global royalty rates can resolve the problem of choosing and determining the scope of licensing between two parties, save the licensing cost, reduce litigation exhaustion and therefore is extremely reasonable.” So far, it is yet to be seen how Chinese courts will decide the global FRAND rate for SEPs and how these decisions are going to be enforced, if the parties do not settle during the process.

Anti-Suit Injunction. The anti-suit injunction system in China belongs to a type of “behavior preservation” measure in China. Article 100 of the Civil Procedure Law stipulates:

For cases in which the action of a party to the lawsuit or any other reason causes difficulty in enforcement of a judgment or causes other harm to the litigants, a People’s Court may, pursuant to an application by a counterparty litigant, rule on preservation of its property or order the counterparty to undertake certain acts or prohibit the counterparty to undertake certain acts; where the litigants do not make an application, a People’s Court may rule that preservation measures be adopted where necessary.

The SPC also issued a judicial interpretation on behavior preservation in general, that is, Provisions of the Supreme People’s Court on Several Issues Concerning the Application of Law in Reviewing the Injunction Cases involving Intellectual Property Disputes. There was no ASI-specific guidance until the first-ever ASI issued in China by the SPC in Huawei v. Conversant, as discussed below.

On August 28, 2020, The SPC issued China’s first ASI ruling during the appeal procedure of Huawei v. Conversant, which prohibited Conversant from enforcing the first instance injunction order issued by the District Court of Düsseldorf of Germany on August 27, 2020. The SPC sets a framework for evaluating ASIs in China, considering factors such as: (1) the impact of enforcing a foreign judgment on the ongoing Chinese lawsuit, (2) the necessity of granting preservation, (3) a reasonable balance of the interests of both the applicant and the respondent, (4) whether the preservation could impair the public interest, (5) whether granting the preservation is consistent with the principle of international comity, etc.

Procedurally it is worth noting that an ASI can be issued by a Chinese court on an ex parte basis. As noted by SPC in Huawei v. Conversant, the court issued the ASI on an ex parte basis without hearing from Conversant before issuing the order. The court reasoned that the motion related to an “urgent matter,” in accordance with the SPC’s guidance that “the People’s Court shall, prior to granting a behavior preservation measure, inquire [of] the applicant and the respondent, except when the situation is urgent, or the inquiry may affect enforcement of the behavior preservation measure.” The parties can seek reconsideration of the grant or denial of an ASI motion by the same court reviewing the ASI motion. The applicant/respondent of an ASI order can
apply for a reconsideration to the people's court that issued the ruling within five days upon receipt of the ruling. The people's court must review the application within ten days after receiving the reconsideration application. During the reconsideration procedure, the parties can submit evidence and hire lawyers to make arguments for them. The court usually holds a hearing, organizes the evidence production and cross-examination, and hears the opinions from both parties.

For instance, in *Huawei v. Conversant*, Conversant filed a reconsideration application on September 2, 2020, with the SPC and a hearing was held on September 4, 2020. The attorneys for both parties attended the hearing. In *Xiaomi v. Interdigital*, InterDigital filed the reconsideration application to the Wuhan Court a few days after the ASI ruling was issued on September 23, 2020 (the reconsideration ruling does not mention the specific date of the application), and a hearing was held on October 16, 2020. The attorneys for both parties attended the hearing, during which InterDigital submitted 17 items of evidence and the Court provided Xiaomi's previous ASI application and evidence to InterDigital.57

**Conclusion**
China has become a major jurisdiction for resolving global SEP disputes, with its courts now open to global rate-setting and ASI/AASI. The observations we provide in this article may help companies faced with SEP litigation in China familiarize themselves with the lay of the land.  

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4 CPL, art. 267.


13 All relevant information was gathered up to Jan. 15, 2021, through keyword searches from public sources, including China Judgments Online https://wenshuch.gov.cn/, where the Chinese courts publish rulings and judgments, and various other public websites.


15 When one plaintiff sues multiple non-related defendants over the same patent, each case would be given a different case number, and we do not group these cases into one “set” since these cases involve different parties on the defendant side.

16 In June 2016, Qualcomm filed a lawsuit against Meizu, a Chinese mobile phone company, in the Beijing IP Court, requesting a determination that Qualcomm’s license terms offered to Meizu were FRAND and a ruling that Meizu should take a license under those terms for 3G and 4G SEPs. Following that initial complaint, Qualcomm filed 16 additional patent infringement complaints, some on SEPs and others on non-SEPs against Meizu in Beijing and Shanghai IP Courts. See Qualcomm and Meizu Sign 3G/4G Global Patent License Agreement, *QUALCOMM* (Dec. 30, 2016), https://www.qualcomm.com/news/releases/2016/12/30/qualcomm-and-meizu-sign-3g4g-global-patent-license-agreement; Qualcomm Files 17 New Complaints in China Courts Against Smartphone Maker Meizu, *Reuters* (June 30, 2016), https://www.reuters.com/article/us-qualcomm-meizu-patents/

The three cases accepted in 2012 were part of the Nokia v. Huaqin set of cases first accepted in 2011 by the Shanghai No.1 Intermediate People’s Court. Nokia’s initial 2011 case filing claimed Huaqin’s infringement of four SEPs owned by Nokia. The court subsequently decided to have separate cases for each of the four SEPs, resulting in three spin-off cases in 2012. Therefore, the three cases in 2012 are already accounted for in the Nokia v. Huaqin set of cases in 2011. For this reason, zero set of cases is counted as accepted in 2012.


Fei Deng et al., Comparative Analysis of Court-Determined FRAND Royalty Rates, ANTITRUST, Summer 2018, at 47.


Patent Infringement Interpretations (ii), art. 24.3.


Id. at 5.


CPL, art. 100.


CPL Interpretations, art. 171.


Id. at 23.
The Risks of Radicalism: Exacerbating Harms from Type I Errors

By Koren W. Wong-Ervin, Anne Layne-Farrar & James Moore

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Calls to radically change U.S. antitrust law continue to be a focus of law and policy makers. According to proponents of the proposed changes, drastic legislative amendments are necessary to remedy the (perceived) failures of current antitrust standards to prohibit anticompetitive conduct, in particular in high-technology markets. While efforts to address market failures are certainly worthy of discussion, the various legislative proposals risk serious adverse consequences, including higher prices for consumers and reduced innovation and consumer choice.

This article begins with a brief discussion of the economic basis for regulation, followed by a summary of recently proposed legislation from Senators Elizabeth Warren and Amy Klobuchar. The main part of this article is an exploration of the risks posed by these draft bills through a retrospective examination of market developments following past interventions by antitrust agencies.

I. The Economic Basis for Regulation

As an initial matter, it is worth noting that antitrust law is not regulation. Rather, it is proscriptive and not prescriptive in nature, with a default of legality. This is important because, among other things, creating ex ante regulation to prevent certain conduct risks sacrificing the efficiencies and other benefits of that conduct by imposing potentially rigid rules that lack the flexibility of existing antitrust rule of reason assessments. One of the main benefits of relying on existing antitrust laws is that they proceed primarily through fact-specific case-by-case analyses, which are more likely to maximize consumer welfare than are ex ante regulations.

That said, the theoretical basis for economic regulation rests on the idea that regulation may serve to improve the allocation of resources in a particular industry compared to the outcome in the absence of regulation. Successful identification of a market failure is a necessary but not a sufficient condition to justify regulation on economic grounds. Once a potential market failure has been identified, the proposed regulatory solution must itself survive a rigorous economic cost-benefit analysis, one that factors in the potential for imperfect regulation and unintended consequences as well as the effect of alternative solutions based on private ordering.2

When considered in this light, there are several problems with the contentions that we have a market concentration problem. For example, because economy-wide statistics inevitably aggregate economic phenomena across product and geographic lines, they can grossly overstate concentration in well-defined antitrust markets. Indeed, as then Department of Justice (“DOJ”) Chief Economist Luke Froeb and Senior Economic Counsel Greg Werden explained, the “key evidence” underlying the increasing industry concentration contention and the subsequent calls for antitrust reform is data from the U.S. Census Bureau.3 “But these data do not demonstrate increasing concentration of markets, i.e. ranges of economic activity in which competitive processes determine price and quality, and in which the impact of mergers and trade restraints
are evaluated in antitrust law.”4 Instead, “Census data relate to aggregations of economic activity much broader than markets.”5

In analyzing the “issue brief” put out by the Obama Administration’s Council of Economic Advisors (CEA) (the principal study relied upon by those claiming we have a concentration problem), the DOJ economists concluded that:

[E]ven the least aggregated Census data can be over a hundred times too aggregated, yet the CEA used the most aggregated Census data. It principally cited the change in the 50-firm concentration ratio for 13 broad sectors of the U.S. economy, such as retail trade. We agree with Carl Shapiro, a member of the CEA during the Obama Administration (2011–12), that these data are “not informative regarding the state of competition.”6

The economists also found that “[r]eliable data on trends in market concentration are available for only a few sectors of the economy, and for several, market concentration has not increased despite substantial merger activity.”7

More importantly, even if we had a concentration or competition problem, aggregate statistics are ultimately tangential, or even irrelevant, to the question of whether alleged conduct is actually anticompetitive. Indeed, there is great risk in equating concentration with harm. Fears about concentration ignore its benefits, including economies of scale, self-financing, ability to take and survive risks, and multilevel integration. As Professor Steve Berry has explained: “[P]roduct quality is going up. That’s pushing price up. That pushes margins up. The marginal cost is going down as firms get better logistics and locate closer to their customers. Marginal cost is falling. That’s efficiency. But markups go up.”8

II. Current Proposed Legislation and Risked Unintended Consequences

Recent draft legislation from 2020 includes a comprehensive bill by Senator Elizabeth Warren9 and a narrower bill focused on exclusionary conduct by Senator Amy Klobuchar.10 The Warren bill would dispense entirely with the existing case-by-case fact-specific analysis of competitive effects in favor of outright bans on so-called “mega mergers,”11 and includes presumptions of illegality for “large mergers.”12

The Warren bill would also reintroduce long-ago abandoned presumptions of illegality for commonplace13 vertical restraints such as tying and bundling, even when practiced by firms without substantial market power, i.e. the ability to raise market prices above or reduce output below competitive levels for a significant period of time. The Warren bill would abandon the well-accepted definition of substantial market power and would instead interject vague notions of “fairness” to allow for a finding of “market power” based upon factors such as “directly or indirectly impos[ing] an unfair purchase or selling terms or any other unfair trading condition.”14

The Klobuchar bill would create similar presumptions of illegality based upon a market share
threshold of 50 percent. In order to overcome these presumptions, both bills would require firms to accomplish the near impossible task of proving a negative in terms of harm to competition. Specifically, the Warren proposal would require firms to prove “through clear and convincing evidence that the conduct does not materially harm competition or the competitive process.” It would also prohibit courts from balancing “procompetitive efficiencies with anticompetitive impacts.”15 Similarly, the Klobuchar bill would require firms to prove that their exclusionary conduct does not present an “appreciable risk of harming competition.”16

Among other things, these bills would overturn decades of Supreme Court precedent in which the Court has held that vertical restraints must be evaluated under a full-blown, effects-based (or rule of reason) analysis.17 The burden shifting in favor of presumptions of illegality would also eliminate competition on the merits as a viable defense. In addition, the bills would require decades of judicial decisions to decide what the new language means. For example, what is “appreciable risk”? Is it negligible risk, or is the bar higher? Finally, the bills would also be contrary to the robust body of empirical evidence, including leading meta-studies from economists at the DOJ and Federal Trade Commission (“FTC”), indicating that vertical restraints and mergers are generally procompetitive or benign.18

Most importantly, the proposed legislation risks serious harm to consumers, including an increased danger of higher prices from the greater risk of type I errors (false positives). As the Supreme Court has recognized, courts face limitations in distinguishing between pro- and anticompetitive conduct in antitrust cases and has emphasized the need to avoid type I errors, particularly in monopolization cases.19 The Court has also expressed concerns, originally explained in Judge Frank Easterbrook’s seminal analysis, that the cost to consumers arising from type I errors might be greater than those attributable to type II errors (false negatives) because “the economic system corrects monopoly more readily than it corrects judicial errors.”20 Such imbalances are likely to be exacerbated under the two Senator-proposed bills that would abandon the rule of reason analysis required by the Supreme Court in favor of outright bans and presumptions of illegality. In other words, even under the existing case-specific analysis, there are bound to be errors (in both directions), particularly when the analysis involves predicting future market dynamics. Such errors would likely only increase under rigid prohibitions or presumptions that dispense with the fact-specific analysis required to understand whether a particular merger or type of conduct actually harms (or, in the case of mergers, is likely to harm) competition and consumers.

III. Evidence from Historical Experience

Evidence of the possible consequences of antitrust intervention — whether through merger control or conduct investigations — can be traced from the “old economy” era following passage of the Sherman Act in 1890 through to the modern digital economy. In several cases, the U.S. Antitrust Agencies brought enforcement actions to block transactions based upon predictions
that the deals would entrench a market leader. Yet, evidence of what actually happened in the real world illustrates the difficulties of accurately predicting future market realities. While it is difficult to predict and model the possible consequences of a government intervention since the but-for world is unknowable, these examples do highlight the need for great caution before adopting legislation that is likely to exacerbate the possible detrimental consequences arising from false positives.

One example is the FTC’s 2000 decision to block the merger of Milnot Holding and H.J. Heinz on the grounds that it would have resulted in a reduction of the number of competing firms from three to two. A retrospective analysis conducted by an FTC economist revealed that, in the eight years following the FTC’s decision to block the merger, market concentration and the prices offered by the market leader significantly increased even though the merger had been blocked.\(^{21}\) One possible explanation (predicted by the parties) is that the merger would have created a more effective second competitor to take on the industry leader. In other words, the FTC’s intervention deprived the market of a strong #2 competitor, which could have disciplined prices to the benefit of consumers. For example, the merging parties had argued that the greater market penetration enabled by the combination of the parties’ brands was necessary to recoup investments in advertising that are essential to launching new products.\(^{22}\) Without this market penetration, Heinz predicted that it would be unable to chip away at Gerber’s significant market share.

An example discussed in a theoretical paper written by former FTC Chairman Tim Muris and former FTC General Counsel Jonathan Neuchterlein is the DOJ’s 1944 case against the Great Atlantic and Pacific Tea Company (more commonly known as A&P), whose executives faced charges for criminal violations of the Sherman Act.\(^{23}\) The district court convicted A&P on two core theories of liability: (1) that A&P engaged in predatory low-cost pricing to drive out its rivals;\(^{24}\) and (2) that the company obtained an unlawful efficiency advantage through vertical integration.\(^{25}\) According to the district court, these practices resulted in “unreasonable advantages” over competing grocery stores and higher costs to those stores.\(^{26}\) As Muris & Neuchterlein explain, the ultimate result of this prosecution may have been to discourage low-cost distribution practices and low pricing due to the risk of criminal exposure — to the detriment of consumers.\(^{27}\) These concerns regarding enforcement actions remain today. For example, in the modern economy, grocers like Wal-Mart, Costco, and Sam’s Club have pursued vertical low-cost, vertical integration — in other words, much of the same conduct that A&P was accused of many decades ago. Yet the Klobuchar bill would eliminate the Supreme Court’s *Brooke Group* test for predatory pricing — the very test that makes prosecutions like that against A&P more difficult and that otherwise limits overenforcement against low-cost pricing.

There is also the FTC’s 2004 decision to challenge Blockbuster Video’s proposed acquisition of Hollywood Video, which the parties sought at least in part to address new competition, including from Netflix.\(^{28}\) Contrary to the FTC’s prediction that the merger would have entrenched Blockbuster as the market leader, Blockbuster went bankrupt within five years of the parties’
decision to abandon the deal in response to the FTC suit to block it. Retrospective analyses of Blockbuster’s fall reveal that Blockbuster was unable to adapt to the advantages of the new Netflix business model, which included lower operational costs without brick-and-mortar retail stores, lower distribution costs associated with direct-to-customer DVD shipping, a greater variety of movie selections, and the rise of online streaming following the growth of broadband access. The FTC’s analysis failed to give sufficient weight to these market developments.

Again, while it is difficult to predict and model the possible consequences of government intervention, according to the merging parties “[a]n acquisition of Hollywood would [have] allow[ed] Blockbuster to immediately accelerate its plans to bring its expanded array of offerings to more consumers through an accretive acquisition of stores.” In other words, the merger could have enabled Blockbuster to continue expanding consumer choices by enabling it to immediately expand retail locations without additional capital expenditures. Another possible result of allowing the merger is that it would have given Blockbuster the tools to keep up with Netflix. This would have given consumers one more online option and kept mail-order video services — which Blockbuster was in the process of launching — and potentially streaming services, more competitive.

As another example of the difficulties of predicting future market realities, particularly in fast-moving technology markets, consider the FTC’s 2000 decision to impose remedies as a condition of allowing AOL’s merger with Time Warner. Contrary to the FTC’s prediction that the merger would enable AOL to become the leading provider of broadband Internet access, AOL quickly faded with the rise of other broadband providers. The FTC presumed, based on historical experience, that AOL would carry its dominance in dial-up forward to broadband. The cable companies, however, surpassed AOL by building powerful broadband networks while AOL continued to rely on outdated dial-up technologies. By the time AOL introduced its own broadband service at a premium, it was too late. Yet another example can be seen in the DOJ’s 2000 decision to condition AT&T’s (which owned Excite@Home, one of the largest providers of broadband Internet access) acquisition of MediaOne on its divestiture of MediaOne’s interests in Road Runner, a web-portal provider that competed with Excite@Home. Following the DOJ’s remedy, Excite@Home declare bankruptcy despite the DOJ’s predictions. In other words, the DOJ’s prediction that the combined company’s interests in the two Internet portals would give the company “undue leverage in its dealings with broadband content providers” failed to appreciate the nature of dynamic markets in which new entrants can, and often do, overtake incumbents by rendering once-dominant business models (in this case, the walled-in environment model of AOL, Road Runner, and Excite@Home) antiquated.
IV. Conclusion

The examples discussed in this article illustrate that, even under existing fact-specific effects-based analyses, errors occur. Adopting legislation that would prevent antitrust enforcers from conducting careful analysis would deprive the agencies of the ability to minimize the false positives that risk harm to consumers and competition.
Vertical restraints are ubiquitous and widely used by a variety of firms, including those without substantial market power. Given that the potential to harm competition and generate anticompetitive effects arises only when vertical restraints are practiced by a firm with substantial market power, the fact that such conduct is commonplace even for firms without the ability to exclude is a strong indication that there are legitimate business justifications for the conduct that have nothing to do with seeking to exclude competitors.

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4 Id. at 1.

5 Id. at 1.

6 Id. at 1.

7 Id. at 1.

8 Transcript at 7, The Current Landscape of Competition and Privacy Law and Policy, Fed. Trade Comm’n Hearings on Competition and Consumer Protection in the 21st Century (September 13, 2018). In addition, there is very little empirical basis to presume any systematic relationship between market structure, competition, and innovation. While there is credible causal evidence that market incentives matter, the empirical literature attempting to link market structure — typically measured by the number of firms or market shares in broadly defined markets — and product market competition to innovation are based on cross-section analyses that do not produce casual inference and as a whole yield inconclusive results.

9 Anti-Monopoly and Competition Restoration Act, 116th Cong. (2020). Draft Bill on file with authors. The draft bill addresses a wide variety of issues related to merger control, conduct issues, and agency enforcement authority, including: banning all “mega mergers”; imposing stringent additional procedural requirements on “large mergers”; shifting the (heightened) burden of proof as to all other mergers on the merging parties; narrowing consideration of merger efficiencies; requiring notifications to state attorneys general; mandating review, and potentially unwinding, of all “mega mergers” from the last twenty years; expanding individual liability, particularly for CEOs; severely increasing the categories of conduct constituting restraints of trade or monopoly practices; expanding the FTC’s remedial authorities; and overturning Supreme Court precedents that heightened standards for pleadings and class certification.


11 “Mega mergers” are defined as mergers in which either the acquiring entity or acquired entity has annual revenue of more than $40 billion; both entities have annual revenue of more than $15 billion; the post-merger entity would have market shares of greater than 45 percent as a seller or 25 percent as a buyer; and the transaction would result in fewer than four significant competitors in the marketplace. The bill carves out an exception for certain transactions that meet the “failing firm” standard.

12 “Large mergers” are defined as mergers in which either the acquiring entity or acquired entity has annual revenue of $5 billion to $40 billion; both entities have annual revenue of $1 billion to $15 billion; the post-merger entity would have market shares of 10 percent to 45 percent as a seller or 10 percent to 25 percent as a buyer; the transaction would result in fewer than five significant competitors in the marketplace; and during the preceding seven-year period, either party has been found to have violated the antitrust laws.

13 Vertical restraints are ubiquitous and widely used by a variety of firms, including those without substantial market power. Given that the potential to harm competition and generate anticompetitive effects arises only when vertical restraints are practiced by a firm with substantial market power, the fact that such conduct is commonplace even for firms without the ability to exclude is a strong indication that there are legitimate business justifications for the conduct that have nothing to do with seeking to exclude competitors.

14 Anti-Monopoly and Competition Restoration Act, 116th Cong. § 6(a) (2020).
See, e.g., Continental T.V., Inc. v. GTE Sylvania, Inc., 433 U.S. 36, 54–55 (1977) (concluding that vertical territorial restrictions reduce intrabrand competition but “promote intrabrand competition by allowing the manufacturer to achieve certain efficiencies in the distribution of its products”); State Oil Co. v. Khan, 522 U.S. 3, 18 (1997) (holding that maximum resale price maintenance agreements are subject to the rule of reason, not per se rule, because “the per se rule [as applied to maximum RPM agreements] could in fact exacerbate problems related to the unrestrained exercise of market power by monopolist dealers” and thus “may actually harm consumers and manufacturers”); Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877, 890 (2007) (holding that minimum RPM agreements are also subject to the rule of reason due to promotion of intrabrand competition by “encourag[ing] retailers to invest in tangible or intangible services or promotional efforts that aid the manufacturer’s position as against rival manufacturers” and by potentially “giv[ing] consumers more options so that they can choose among low-price, low-service brands; high-price, high-service brands; and brands that fall in between”); Jefferson Parish Hosp. Dist. No. 2. v. Hyde, 466 U.S. 2, 15–16 (1984) (limiting per se treatment in tying cases to those in which there is an element of “forcing” and a substantial volume of commerce is foreclosed).

For a summary of the leading meta-studies indicating that verticals are generally procompetitive or benign, see Koren W. Wong-Ervin’s 2019 article at https://www.americanbar.org/content/dam/aba/publishing/antitrust_source/2018-2019/atsource-february2019/feb19_wong_ervin_2_18f.pdf.

Pac. Bell Tel. Co. v. LinkLine Commc’ns, Inc., 555 U.S. 438, 451 (2009) (“To avoid chilling aggressive price competition, we have carefully limited the circumstances under which plaintiffs can state a Sherman Act claim by alleging that prices are too low.”); Credit Suisse Sec. (USA) LLC v.Billing, 551 U.S. 264, 283 (2007) (“[W]here the threat of antitrust lawsuits, through error and disincentive, could seriously alter underwriter conduct in undesirable ways, to allow an antitrust lawsuit would threaten serious harm to the efficient functioning of the securities markets.”); Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 414 (2004) (“Mistaken inferences and the resulting false condemnations are especially costly, because they chill the very conduct the antitrust laws are designed to protect.” (internal quotations omitted)).
The Economics of Vertical Restraints in Digital Markets
Daniel P. O’Brien

INTRODUCTION

A. Purpose of This Chapter

Vertical restraints are contractual arrangements between firms at different levels in a supply chain (e.g., manufacturer and retailer, manufacturer and distributor, distributor and retailer) that are more complex than simple per-unit pricing arrangements. The purpose of this chapter is to provide an overview of the economics of vertical restraints and thereby provide an economic foundation for the antitrust analysis of vertical restraints.

The literature on vertical restraints is large. This chapter touches on many of the relevant concepts at a high level, references past work for certain ideas, and focuses in depth on four main issues: (i) the general nature of double marginalization and the benefits of vertical restraints that eliminate it in both single- and multi-product settings; (ii) the welfare effects of vertical restraints that address service externalities; (iii) the implications of bilateral contracting and bargaining for the effects of vertical restraints; and (iv) the effects of anti-steering provisions, a vertical restraint that does not appear explicitly in most textbooks but has been prominent in antitrust cases in the digital age.


Antitrust attitudes toward vertical mergers emphasize the tradeoff between the elimination of double marginalization (“EDM”) and the foreclosure of rivals, and because vertical restraints frequently involve motivations similar to vertical mergers, vertical restraints can also involve this tradeoff. This was the central tradeoff evaluated by the economic experts in the AT&T-Time Warner merger, and it is a central focus of the recently issued U.S. Vertical Merger Guidelines.
B. The Digital and Non-Digital Economies

Although this volume is directed at antitrust analysis for the “Digital Economy,” the analysis in this chapter is equally applicable to all (e)commerce irrespective of the degree of ‘e’ involved in the commerce. The advent of the digital age has not changed the economic concepts that have developed since Adam Smith’s Wealth of Nations to understand the role of contracts in the allocation of goods and resources in the economy.

Certain factors that are relevant for the economic analysis of vertical restraints can differ between environments that make heavy use of ecommerce and environments that do not, but these factors affect the characteristics of the market under study, not the economic principles that govern the analysis. For example, the increase in the number of next-day deliveries in the digital age likely occurred because the cost of next day delivery fell due to the digitization of ordering and inventory management and the logistics of distribution. There are no new economic concepts required to understand the effects of lower costs on output. Similarly, a high-end golf club manufacturer’s motivation to prevent consumers from getting fitted for the clubs at significant cost to a golf shop and then purchasing the clubs at discounted prices on the internet does not require any new “digital” economics to understand. The manufacturer’s concern that golf shops would stop supplying fitting services under these circumstances exists whether the discounted clubs are sold on the internet or in a discount brick & mortar shop. The golf club

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4 By one estimate, Amazon’s warehouse expansion between 2006 and 2018 “reduced its total shipping cost by over 50% and increased its profit margin by between 5 and 14% since 2006,” and that “prices on Amazon have fallen by approximately 40% over the same period, suggesting that a significant share of the cost savings have been passed on to consumers.” Jean-François Houde, Peter Newberry & Katja Seim, Economies of Density in E-Commerce: A Study of Amazon’s Fulfillment Center Network ii (Nat’l Bureau of Econ. Rsch., Working Paper No. 23361, 2017).

manufacturer’s concern may be higher in the digital age, but economists knew long before the digital age that a reduction in the cost of free-riding (go home and order the clubs at discounted prices for delivery the next day from an outlet with minimal overhead) is likely to increase free riding.

While ecommerce has not created new economic constructs, there is little doubt that certain industry characteristics (e.g., economies of scale, network effects) that can affect the conclusions of an economic analysis have become more prevalent. These characteristics can make it more likely or less likely that specific vertical restraints harm competition, depending on the circumstances.

C. Relationship to Vertical Mergers/Integration

Many issues that are important in the analysis of vertical mergers are also important in the analysis of vertical restraints. Indeed, much of the literature on vertical restraints examines whether vertical restraints can achieve “the vertically integrated” or “fully integrated” outcome, which typically means the outcome that would arise if an upstream seller owned its distributors or a downstream buyer owned its suppliers. The logic for this approach is that many important motivations for vertical restraints involve designing contracts that provide the contracting parties with incentives to make independent decisions that maximize their joint profits (their “fully integrated” profits), so they can divide those profits with transfer payments. This means that in many contexts, vertical restraints can have similar or even the same effects as vertical integration, depending on the context.

John Yun has a separate chapter in this Report on vertical integration and mergers. There is inevitable overlap between the content of these chapters. I will be clear about when the analysis in this chapter applies to questions about vertical mergers and when it does not. The reader is referred to Yun’s chapter for a discussion focused specifically on vertical mergers.
I. OVERVIEW OF THE MOTIVATIONS FOR AND EFFECTS OF VERTICAL RESTRAINTS

A. The Nature of the Problem

Firms at different stages of production (e.g., manufacturer and distributor, manufacturer and retailer, distributor and retailer) contract with each other to exchange goods and services that the buyer will either resell or use to make another product. The contracting seller is commonly referred to as the *upstream* firm operating in the upstream market (although the boundary of the relevant antitrust market at the upstream level is not always obvious and often requires analysis). The contracting buyer is commonly referred to as the *downstream* firm operating in the downstream market (with the same caveat about the boundaries of the relevant antitrust market). The contract between the upstream and downstream firms is called a *vertical contract*.

The simplest vertical contract and the one discussed first in most textbooks on industrial organization is a *linear tariff*, where the upstream firm charges the downstream firm a per-unit price—a “linear” price—for the product.\(^6\) I use the term “tariff” to distinguish the part of the vertical contract that involves money exchanged between the upstream and downstream firm from other parts of the contract. While linear tariffs are simple, in many cases firms in a vertical channel can increase their joint profits with contractual terms that go beyond simple linear prices. These terms are called *vertical restraints*. Examples of practices that have been labeled vertical restraints include certain forms of nonlinear pricing (e.g., quantity forcing, all-units discounts, or retroactive rebates), resale price maintenance (“RPM”), exclusive territories (“ET”), exclusive dealing (“ED”), loyalty discounts, anti-steering, tying, and bundled discounts.

The distinguishing characteristic of a vertical restraint is that the amount the downstream firm pays the upstream firm is not represented by a linear tariff but depends

\[^6\text{Denote the number of units sold (the quantity) as } Q \text{ and the price per unit as } w. \text{ A linear tariff transfers } T = wQ \text{ from the downstream buyer to the upstream seller when the buyer purchases the quantity } Q.\]
in some way on downstream prices or quantities (or on other factors, but as we’ll see, dependence of prices and quantities encompasses dependence on other factors). Figure 1 provides a concise taxonomy of vertical restraints based on whether they involve single or multiple products and whether the upstream firm’s tariff is conditioned on its own quantity or price or also on the quantities or prices of rival products.\footnote{The taxonomy in Figure 1 is adapted from the taxonomy of “conditional pricing practices” presented in PATRICK DEGRABA ET AL., FED. TRADE COMM’N, CONDITIONAL PRICING PRACTICES: A SHORT PRIMER (2017), https://ssrn.com/abstract=3039548. That paper is a background document for the Public Workshop on Conditional Pricing Practices cosponsored by the DOJ and FTC on June 23, 2014. Because RPM and exclusive territories were not among the practices discussed at the workshop, they were excluded from the taxonomy of conditional pricing practices. I have included them here as vertical restraints in the appropriate cells in Figure 1.}

\textbf{Figure 1: Taxonomy of Vertical Restraints}

\begin{figure}
\centering
\begin{tabular}{|c|c|}
\hline
\textbf{Own Quantities or Prices} & \textbf{Multi-Product} \\
\hline
\textbf{Single Product} & \textbf{Multi-Product} \\
\hline
\begin{itemize}
\item Tying/bundling units:
  \begin{itemize}
  \item Incremental units discounts
  \item All-units discounts
  \item RPM and Exclusive territories
  \end{itemize}
\end{itemize} & \begin{itemize}
\item Tying/bundling
\item Bundled discounts
\end{itemize} \\
\hline
\textbf{Own and Rivals’ Quantities or Prices} & \textbf{Own and Rivals’ Quantities or Prices} \\
\hline
\begin{itemize}
\item “Loyalty” discounts
\item Anti-steering
\item Exclusive dealing
\end{itemize} & \begin{itemize}
\item Bundled “loyalty” discounts
\item Requirements tying
\end{itemize} \\
\hline
\end{tabular}
\end{figure}

The reader might find it surprising to see exclusive dealing classified as a tariff conditioned on own and rivals’ quantities or prices like loyalty discounts and anti-steering, and to see volume discounts classified as a form of tying or bundling. The explanation is that in a formal economic sense, all vertical restraints involve conditioning monetary transfers on own or own and rivals’ quantities or prices. For example, exclusive dealing can be interpreted as a special case of a share-based loyalty discount in which the...
share threshold is 100 percent and the discount offered for reaching the threshold is large enough that the downstream firm would not purchase positive amounts from a rival. Similarly, the floor on a rival’s retail price imposed through anti-steering is a weak form of exclusive dealing in the sense that the floor limits the amount of the rival’s product the downstream firm will sell. Because ED, loyalty discounts, and anti-steering are related in this way, insights from the exclusive dealing literature can be helpful in the analysis of the other practices. Likewise, a volume discount offered for a single product technically involves bundling over the units of that product, as explained in detail below. Although antitrust law does not refer to volume discounts as a form of tying or bundling, the economic literature recognizes the connection, and insights from that literature on how nonlinear pricing eliminates double marginalization are helpful in the analysis of bundled discounts in the sale of multiple products.

It should be noted that both the economic literature and law are not always clear on the precise meaning of the term “vertical restraint,” in particular, whether contracts that have nonlinear tariffs but no other restraints should be called “vertical restraints.” However, because nonlinear tariffs have an element of bundling, which can be a form of tying (see Section III.A.1 below), and some nonlinear tariffs have been found to be anticompetitive restraints of trade (e.g., all-units discounts and quantity forcing), I adopt the convention that vertical contracts that depart from simple linear tariffs involve vertical restraints.

Why do firms use vertical restraints? It will be helpful to address this question with reference to the classic bubble diagram that economists have found useful in analyzing vertical contracts.

Figure 2 shows production and sales flows in a typical vertical channel, where upstream firms U1 and U2 (and potentially others) sell inputs to downstream firms D1 and D2 (and potentially others) who use the inputs to produce products for sale to final customers. The inputs might be finished products that downstream firms simply resell
to final consumers, as in retailing, or they may be used with other inputs in a production process that produces a finished good or another intermediate good.

**Figure 2: Vertical Structure, Contracts, and Decisions**

In most of the economics literature, contract design and the other decisions that vertically related firms make are modeled as a multi-stage game, often a two-stage game. In stage 1, firms agree to supply terms, including the tariff and other provisions in the contract. In stage 2, firms in the upstream and downstream markets independently make their remaining strategic decisions subject to the contractual terms determined in stage 1. In the classic vertical contracting environment, stage-two decisions include downstream price and non-price decisions and upstream non-price decisions. In multi-sided platforms, stage-two decisions may also involve prices charged to other participants in the platform. Non-price decisions at both levels may involve investments in quality, service, or advertising that typically affect the demand for the firms’ products, or they may involve investments to lower production costs. Throughout this chapter, I conceptualize the vertical contracting problem with this two-stage game framework, as

Electronic copy available at: https://ssrn.com/abstract=3733686
virtually all of the economics literature on vertical restraints is nested within this framework.

In designing their vertical contracts, the contracting parties seek to maximize their profits. In pursuing this objective, firms face two high-level concerns: (1) contractual efficiency, and (2) competition. Vertical restraints are motivated by one or both of these concerns.

B. Contractual Efficiency

Focus first on contracting between U1 and D1, holding fixed the contracts and stage two decisions involving competitors (i.e., holding fixed the contracts and decisions of U2 and D2 in Figure 2.) This abstraction helps highlight the contractual efficiency aspects of vertical restraints.

Suppose initially that firms and courts have complete information and there is no risk or uncertainty and no transaction costs. In the absence of legal constraints, U1 and D1 then can write a complete contract that specifies or constrains in some way all of their stage-two decisions. If the firms can use transfer payments that do not depend on output or their other decisions (e.g., fixed fees), their optimal contract will specify all stage two choices made by U1 and D1 (e.g., D1’s price, D1’s investment, U1’s investment) to maximize joint profits and a fixed transfer payment to divide joint profits. This complete contract would involve vertical restraints under the definition given above (departures from simple linear pricing), although only some of the terms in the contract have been labeled as such in the antitrust literature. In particular, contractual terms that specify or constrain the downstream price would involve some form of RPM; terms that specify or constrain the quantity to be sold or purchased could involve quantity forcing, all-units discounts, take-or-pay provisions; terms that constrain where D1 can sell or the suppliers from which it may buy (or that condition the tariff on these factors) would involve some form of exclusivity, etc. Although other terms in the contract that specify non-price
choices like upstream or downstream investment or advertising are conceptually similar to the terms that have been labelled vertical restraints, such terms generally have not been so labeled in the literature or in antitrust investigations. Importantly, constraints on decisions that have been labeled as vertical restraints and have drawn antitrust scrutiny, e.g., RPM and all-units discounts, are conceptually no different than terms that are not considered vertical restraints, such as joint advertising arrangements or other joint investment projects. Yet, in all cases where fixed transfers are feasible, terms that go beyond simple linear tariffs presumably are designed to maximize some notion of joint profits. The policy question is whether these efforts harm the competitive process in a way that reduces welfare.

Two factors interfere with the idealized “efficient” contract (efficient for the firms) just described. First, it may not be feasible for firms to specify all stage-two decisions in the contract because it may be too costly to monitor these actions and too difficult for a court to verify them in a contract dispute. This circumstance, often due to transaction costs, is known as a situation of incomplete contracts. For example, post-contractual demand-enhancing efforts by the upstream firm (e.g., marketing or decisions that affect quality) and downstream firm (e.g., marketing or product demonstrations) may be too costly to monitor, in which case it would not make sense to specify these decisions in the contract. In this case, although firms may choose not to contract directly over these decisions, they may include vertical restraints in the contract that provide incentives that influence these decisions. In many such cases, vertical restraints can achieve the fully integrated outcome even though the contract is incomplete because the vertical restraints align incentives in ways that induce firms to make the same decisions an integrated firm would make. And in many such cases, vertical restraints that increase joint profits and achieve the fully integrated outcome also increase welfare by lowering price or increasing non-price investment by firms at one or both levels of production. And it is well-known that welfare often rises even if price rises because the benefits from increased non-price
investment often exceed the harm due to higher prices. The goal of antitrust policy is to identify those instances in which vertical restraints that substitute for more complete contracts harm the competitive process in ways that reduce welfare.

Factors that impede contractual efficiency and motivate vertical restraints include various externalities, incomplete or imperfect information, and risk. The motivation for vertical restraints to address these issues becomes evident from an understanding of how simple linear tariffs fail to address these issues:

(i) Double marginalization – the basic vertical externality. When firms employ linear tariffs, an increase in the wholesale price charged by the upstream firm raises the downstream firm’s marginal cost and lowers downstream profits. Similarly, an increase in the downstream price reduces the quantity demanded and lowers upstream profits. These externalities create double marginalization, which is the double-markup due to successive monopoly, which leads to lower joint profits and output than would be true if the firms could contract in a way to eliminate these externalities, as discussed further below.

While the double-marginalization problem is often described as arising from externalities as in the preceding paragraph, the economic literature also recognizes that elevated wholesale margins due to linear wholesale pricing occur when the upstream firm does not bundle the units of the upstream product that it sells to the downstream buyer. While not common in antitrust discussions, this understanding is important because it shows that what is called double marginalization in the single product context is also present in the multiproduct context if the products are substitutes and are not bundled. As explained further in Section III.A.1 below, a motivation for bundled

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8 See ROBERT B. WILSON, NONLINEAR PRICING 88–89 (1993); see also Daniel P. O’Brien & Greg Shaffer, Tying, Bundling, and Double Marginalization (April 18, 2018) (unpublished manuscript), https://ssrn.com/abstract=3165280 (“nesting [tying and bundling] into a common framework” and finding that “double marginalization arises . . . from the inability to bundle objects over which the buyer experiences declining incremental benefits.” (internal quotation marks omitted)).

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discounts in this context is the desire to eliminate the multiproduct variant of double marginalization.

(ii) Non-price vertical externalities. The downstream firm may invest in quality or advertising to increase the demand for the product, which increases upstream profits whenever upstream margins are positive. The upstream firm may invest in quality or advertise so as to increase the demand for the product, which increases downstream profits whenever downstream margins are positive. In either case, investment inflicts a positive externality on the party at the other level in the vertical chain. Other factors equal, this leads to less investment than would occur under full integration.

(iii) Non-price horizontal externalities. In situations with multiple firms at either level in the vertical chain, demand-enhancing investments by individual firms may spillover to benefit rival firms. If the investing firm’s margin is less than the fully integrated margin, then these externalities lead to less investment than the amount a fully integrated firm would choose.

(iv) Risk sharing. In environments where cost or demand is uncertain, the upstream and downstream firms would like to write a contract that shares risk optimally given their risk preferences. As an example, suppose demand is uncertain and the downstream firm is more risk averse than the upstream firm. A higher wholesale price transfers a greater share of the risk to the upstream firm, but it also creates double marginalization.

(v) Information externalities. In many economic environments, firms have private information about the nature of the market in which they sell. For example, the downstream firm may have better information than the upstream firm about demand. In this case, linear pricing can worsen double marginalization relative to a nonlinear tariff that elicits the revelation of demand information by the downstream firm.

C. Competition

The second high-level concern of firms involved in vertical contracting is the
impact on competition. U1 and D1 may recognize the impact of their contractual terms on the stage-two decisions of rivals at the upstream level, the downstream level, or both. This may give them an incentive to use their contracts to soften competition or to compete more aggressively, depending on the circumstances.

Incentives to use vertical contracts to soften competition typically exist alongside the contractual efficiency motivations (i) through (v) discussed in the preceding section. For this reason, the competitive analysis of the effects of vertical restraints requires a case-by-case analysis that takes into account both contractual efficiency effects and competition softening or strengthening effects. The net effects of vertical restraints are complex and highly sensitive to a range of factors, including the following:

(i) The relevant contractual benchmark. Firms in a vertical relationship choose a contract that either specifies a simple linear tariff or vertical restraints that condition monetary transfers on the quantities or retail prices chosen by the downstream firm. Suppose the current contract C involves vertical restraints. The competitive effect of the vertical restraints embodied in C must be measured against a counterfactual that would arise if the vertical restraints were prohibited. Suppose that if the vertical restraints were prohibited, firms would choose contract C’ instead of C. In general, the new contract C’ will involve a different conditioning of monetary transfers between the firms on a different set of factors. To evaluate the effects of the vertical restraints in C, one has to predict the contract C’ that arises when the restraints are prohibited, predict the outcome that occurs under the new contract C’, and compare that outcome with the outcome that arises under the original contract C.

For example, suppose the vertical restraint under consideration is an all-units discount, which offers the buyer a discount on all units purchased if its purchases exceed a minimum quantity threshold. In evaluating the effects of an all-units discount, it matters whether prohibiting the all-units discount would lead to a linear tariff, which could create double marginalization, an alternative nonlinear tariff (e.g., a two-part
tariff), which might have different incentive properties, or an alternative contract with different vertical restraints (e.g., RPM or some other vertical restraint).

A common theme in the literature on vertical restraints is that it is often true that more than one vertical restraint can be used to accomplish the same objective, perhaps with different transaction costs. When this is true, it is obviously important in evaluating the effects of the restraint to take into account the alternatives that may be available to the firm. More generally, it is important to understand the motivation for the vertical restraint in the first place, as that can help determine how the vertical contract is likely to change when one or more vertical restraints are prohibited.

(ii) Upstream and downstream market structure and competitiveness. The effects of vertical restraints depend on the nature of competition in the upstream and downstream markets. However, unlike the case of horizontal mergers and restraints, market power is a poor indicator of the likelihood that a vertical restraint could harm competition. The reason is that both the benefits and harms from vertical restraints can increase with greater market power. For example, greater market power in the upstream market may increase the benefit from using vertical restraints to eliminate double marginalization, and the increase in this benefit due to greater market power may exceed the increase in potential harm form the restraints associated with greater market power.

Antitrust Guidelines frequently use measures of market power as proxies for the likelihood that mergers or specific unilateral conduct may harm competition. For example, the Horizontal Merger Guidelines in most countries specify safe harbors based on concentration indices, and in some cases they specify a rebuttable presumption of harm when concentration exceeds certain thresholds. This is not possible for vertical restraints for the reasons just given. Indeed, the recently issued Vertical Merger Guidelines in the U.S. do not specify safe harbors based on concentration for this reason.9

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(iii) Transaction costs and the degree of nature of contractual incompleteness. The effect of specific vertical restraints generally depends on the cost of specifying different terms in a contract. For example, if downstream firms make important non-price decisions that affect the demand for U1’s product but are too costly to specify in a contract, then vertical restraints may be used to encourage downstream firms to choose or get closer to the non-price decision that a fully integrated firm would choose. On the other hand, if it is possible to contract over non-price decisions directly at relatively low cost, then the motivation for vertical restraints is likely to be something else.

(iv) Bargaining, commitments, and the timing of decisions. The predictions of vertical contracting models are sensitive to whether upstream firms can commit to non-discriminatory terms and refuse to engage in bilateral negotiations, or whether they negotiate (or renegotiate) terms on a bilateral basis. Bilateral negotiations generally create contracting externalities that alter the implications of different vertical restraints, depending on the circumstances.

In recent vertical merger investigations, plaintiffs have used a bargaining framework that assumes that supply contracts and downstream prices are determined simultaneously. However, in most markets with vertical contracting, downstream firms can adjust downstream prices in response to changes in wholesale prices, and bargaining parties are likely to take this into account when bargaining. The difference between sequential and simultaneous determination of wholesale and retail prices might seem like a detail, but economic analysis shows that the distinction is important.

(v) Information structure. The literature on vertical contracting shows that the


10 This was the assumption in the bargaining framework used by the United States Department of Justice in the AT&T-Time Warner merger case. See United States v. AT&T, Inc., 916 F.3d 1029, 1035–36 (D.C. Cir. 2019).
information structure—in particular the presence or absence of private information, uncertainty, and risk; the observability of rival’s contracts; and the verifiability of independent decisions (and thus the degree of contractual incompleteness)—can be important factors for determining the effects of vertical restraints. For example, when a downstream firm has private information about its cost or demand, it is generally not optimal for the firms to agree to set the marginal price equal to marginal cost even in the case of bilateral monopoly, and the result is a degree of double marginalization. Thus, there can be double marginalization even when nonlinear contracts are feasible. As another example, when downstream competitors cannot observe their rival’s supply terms, their behavior depends on beliefs about those terms, and different beliefs lead to different outcomes. And when information is not sufficient to verify actions that are important determinates of value, vertical restraints may be an alternative way induce firms to make joint profit maximizing decisions.

II. MULTI-SIDED PLATFORMS

A. Platforms Involve Additional Externalities

The digital age has increased the role of multi-sided platforms in the economy. The classic, pre-digital age example of a multi-sided platform is a newspaper company that sells newspapers to the public and advertising to companies or consumers attempting to advertise and sell products or convey information for some other reason to the public. In the digital economy, search engines, social media, and online retailers also sell products or services to consumers and advertising to companies or consumers trying to sell products to others.

The main difference between multi-sided platforms and other markets for the purpose of analyzing vertical restraints is that multi-sided platforms involve additional externalities that must be accounted for in the analysis. In the newspaper example, which harkens back to the pre-digital age, the demand for advertising depends on readership,
as greater readership means more consumers are likely to see ads published in the newspaper. Thus, a consumer’s decision to subscribe to a newspaper creates a positive spillover—an externality—on advertisers. Similarly, newspaper advertising may affect the demand for subscriptions (an externality) either positively or negatively, as some consumers benefit from the ads while others prefer to obtain news without the ads. The newspaper example also involves network externalities, as the more consumers that subscribe to a newspaper, the more valuable the newspaper becomes as an advertising outlet, the more ads the newspaper is likely to sell, and the more valuable the newspaper becomes to consumers who purchase subscriptions in part to benefit from the ads.

B. Techniques for the Antitrust Analysis of Vertical Restraints Involving Platforms

Differ Little Techniques for Analyzing Non-Platform Markets

Although an economic literature has developed that focuses on economic aspects of multi-sided platforms, it is important to understand that the economic concepts involved in the analysis of vertical restraints involving multi-sided platforms are little different than they are in the analysis of environments that do not involve multi-sided platforms.

Consider the analogy between the potentially exclusionary effects of the anti-steering restraints employed by American Express (“Amex”), a multi-sided platform, and exclusive dealing by a company that sells a single product in a vertical chain. Amex has two types of customers: (i) merchants, who pay Amex for the right to transact with customers using the American Express Card; and (ii) consumers, who purchase American Express Cards and associated services from Amex to allow them to use the

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11 For a sampling of this literature, see, for example, Jean-Charles Rochet & Jean Tirole, Platform Competition in Two-Sided Markets 1 J. EUR. ECON. Ass’n 990 (2003); Jean-Charles Rochet & Jean Tirole, Two-Sided Markets: A Progress Report, 37 RAND J. ECON. 645 (2006); E. Glen Weyl, A Price Theory of Multi-Sided Platforms, 100 AM. ECON. REV. 1642 (2010).
American Express Card to make purchases from merchants under contract with Amex. Thus, Amex is a multi-sided platform that provides services to merchants and consumers, and the benefits to these groups from Amex’s services are obviously interrelated—there are both cross-platform and network externalities.

Amex’s anti-steering provisions constrained retailers’ ability to charge consumers different prices for purchases made using the American Express Card than they charge for purchases using a different credit card. A potentially pro-competitive motivation for this restriction is the promotion of services Amex offered consumers that helped them identify stores they might find attractive, thereby encouraging consumers to visit stores that accept the American Express Card. The argument is that if retailers could turn around and sell the product to customers attracted by Amex’s services using a different credit card that offered a higher profit margin, Amex’s incentives to offer these services would diminish, and consumers could be worse off as a result.

Without getting into the merits of this argument,\(^{12}\) observe that it is conceptually little different than an argument that a manufacturer’s incentives to make investments that attract consumers to a store are greater when it uses exclusive dealing to contractually restrain retailers from selling competing products that would benefit from the manufacturer’s investments. The anti-steering restrictions imposed by Amex are best thought of as a weak form of exclusive dealing that constrains but does not prohibit retailers from selling rival products or services, thereby making it more profitable for Amex to invest. The antitrust issue is whether the potential benefits of such investments outweigh potential harms from exclusionary or competition softening effects of the restraint. The fact that Amex is a multi-sided platform (selling to both merchants and consumers) likely affects the quantitative analysis of the incentives for and the net effects

\(^{12}\) The competitive effect of Amex’s anti-steering provisions was the primary issue before the U.S. Supreme Court in Ohio v. American Express Co., 138 S. Ct. 2274 (2018). In a 5-4 decision, the majority held that Amex’s anti-steering provisions did not unreasonably restrain trade.
of the restraint, and it obviously should be accounted for in the analysis, but the conceptual point is the same in both cases—the vertical restraint may correct the externality that allows competitors to benefit or “free ride” on the platform’s or the manufacturer’s investment.

The point here is not that the economic literature on multi-sided platforms is not relevant or has not contributed to our understanding of economic issues related to platforms, but only that the determination whether a particular vertical restraint in a particular circumstance is procompetitive or anticompetitive uses the same general tools regardless of whether one or more parties to the vertical contract runs a multi-sided platform.

III. TAXONOMY OF ECONOMIC EFFECTS OF VERTICAL RESTRAINTS

In this section I provide additional detail on the effects of vertical restraints based on the economic literature, organizing the discussion around the following vertical structures: (A) bilateral monopoly; (B) upstream monopoly and downstream competition; (C) downstream monopoly and upstream oligopoly, and (D) competition at both levels. Although most real-world situations fall under (D), the abstractions present in (A) through (C) correspond to insights developed in the literature and are useful for identifying and describing factors that are relevant for the analysis of vertical restraints in the general case (D).

To help understand the economics issues, I use a simplified example throughout this section. Assume that one or more upstream firms produce a product that is resold by one or more downstream firms.\(^\text{13}\) In the simplest case with homogenous products, the demand for the downstream product is \(Q = 100 - P\), where \(Q\) is quantity and \(P\) is the downstream price, as illustrated in Figure 3. I introduce product differentiation that

\(^{13}\) The analysis in this section holds if the downstream firm uses other inputs in fixed proportions with the upstream firm’s product.
generates the same demand for each product when firms charge the same downstream prices below as needed. The wholesale price (not shown) is denoted \( w \), and if the firms use fixed transfer payments, the transfer (not shown) is denoted \( F \). The upstream firm produces at constant marginal cost \( c \), and downstream firms incur no costs to bring the product to market other than what they pay upstream firms for the product.\(^{14}\) For simplicity, I also assume that upstream marginal cost is zero in numerical examples that follow, but I sometimes refer to their marginal cost as \( c \) to emphasize the role of upstream margins in determining the effects of vertical restraints. The dotted lines representing marginal revenue are explained below.

**Figure 3: Illustrative Example with Linear Demand and Constant Marginal Cost**

![Figure 3](https://ssrn.com/abstract=3733686)

Much of the literature compares the effects of vertical restraints to two reference points: the price that would prevail if the upstream and downstream markets were perfectly competitive, and the price that would prevail if the markets were monopolized.

\(^{14}\) This assumption is innocuous when downstream firms produce at constant marginal cost.

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by an integrated firm. The perfectly competitive price is $P^C = c$ in general and $P^C = c = 0$ in all numerical examples in this section. The fully integrated monopoly price is $P^M = (100 + c)/2$ in general and $P^M = 50$ in the numerical examples. I follow the literature and refer to outcomes that yield the monopoly price as the “fully integrated” or “vertically integrated” outcome. Although the fully integrated outcome is a common reference point, it is important to keep in mind that vertical restraints do not always achieve that outcome, and when this is true, this outcome is less relevant as a reference point.

A. Successive Monopoly

1. Double Marginalization – The Basic Vertical Pricing Externality

As a starting point, it is useful to examine contracting between a single upstream and single downstream firm—successive monopoly. In terms of the bubble diagram in Figure 2, think of the contracts and decisions involving U2 and D2 as fixed, and focus on contracting between U1 and D1 when the residual demand for U1’s product is $Q = 100 - P$ as in Figure 3.

The most widely discussed inefficiency in vertical contracts that do not include vertical restraints is double marginalization, referred to as “the basic vertical externality” in Tirole’s authoritative textbook on Industrial Organization.15 Under successive monopoly (although all that is required is market power at both levels of the industry), this externality arises when the wholesale price exceeds marginal cost, $w > c$. In this case, when the downstream firm raises its price and causes a reduction in the quantity sold, it

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15 See JEAN TIROLE, THE THEORY OF INDUSTRIAL ORGANIZATION 174 (1988). The first formal analysis of double marginalization comes from Joseph J. Spengler, Vertical Integration and Antitrust Policy, 58 J. POL. ECON. 347 (1950). Augustin Cournot discovered a close cousin of double marginalization in his analysis of the “Cournot complements problem,” which involves two independent producers of perfectly complementary products selling to common buyers that use the complements to form a system. See A.A. Cournot, Researches into the Mathematical Principles of the Theory of Wealth (Macmillan 1897) (1838). It can be shown that the double marginalization problem is mathematically identical to a “Stackelberg” (sequential) version of the Cournot complements problem. See O’Brien, supra note 1, at 48, 49.
causes a reduction in upstream profit of \( w - c \) for each unit of sale that is lost. Because the downstream firm does not take into account this externality in choosing the downstream profit-maximizing price, it sets the downstream price higher than it would if it were vertically integrated and could acquire the input internally at cost.

In the linear demand example in Figure 3, it can be shown that the profit-maximizing wholesale price is $50, and the profit-maximizing retail price given a wholesale price of $50 is $75. Thus, compared to the fully integrated outcome with a retail price $50 that can be achieved through certain vertical restraints (as discussed further below), double marginalization raises the retail price from $50 to $75, harming consumers and reducing total welfare. Turning this around, under successive monopoly, vertical restraints that achieve the fully integrated outcome reduce price from $75 to $50, benefiting consumers and increasing total welfare.

**Bundling interpretation.** The externality interpretation of double marginalization is helpful for pointing out how to eliminate the problem. Specifically, the externality disappears when \( w = c \), in which case the upstream firm’s profit from the marginal unit is zero and the downstream firm’s pricing decision no longer affects upstream profit.

However, another interpretation of double marginalization that is rarely discussed in the literature is extremely useful for understanding both the nature of the distortion and how to eliminate it in more general settings, e.g., when firms sell multiple products. Economic analysis shows that *linear pricing*, which most scholars understand as the root cause of double marginalization, is a consequence of constraints on the upstream seller’s ability to bundle the units of the product. Because double marginalization is a consequence of linear pricing, it follows that double marginalization is also a consequence of constraints on the ability to bundle.\(^\text{16}\) More generally, economic analysis

\(^{16}\) The association between nonlinear pricing and bundling units of products is in the economic folklore and is discussed to some degree in the literature. See, e.g., Wilson, *supra* note 8, at 88–89. O’Brien & Shaffer discuss the connection between double marginalization and the inability to bundle in more general settings.
shows that constraints on the upstream firm’s ability to bundle any substitute objects that it sells, whether the objects are units of the same product (each unit is identical), units of different substitute products, or both, generates double marginalization. The recognition that double marginalization is a consequence of the inability to bundle substitutes has two important implications. First, double marginalization is a more widespread problem in vertical contracting than is generally recognized, as it involves not only the absence of bundling the units of specific products, but also the absence of bundling across products. Second, constraints on the ability to bundle substitute products prevents contracting firms from solving double marginalization through bundling. The second observation has obvious implications for policy toward tying and bundling, as discussed further below.

The notion that it is helpful or even relevant to view departures from linear tariffs as arising from constraints on bundling might seem inapposite to many readers—what does linear and nonlinear pricing have to do with bundling? Suppose the upstream seller charges $10 per unit for a product and the downstream firm purchases two units of the product. This tariff does not bundle the units of the product. The reason is that the sum of the prices paid to purchase two units in separate transactions, $20, is the same as total price paid to purchase the “bundle” of two units in a single transaction. On the other hand, suppose the upstream seller charges a two-part tariff with a fixed fee of $15 and a wholesale price of $5. (These numbers are purely illustrative.) This tariff bundles the two units because the sum of the prices paid when two single units are purchased in separate transactions is $40 [= 2 x (15 + 5)], and this exceeds the total price paid for a bundle of two units purchased in a single transaction, $25 [= 15 + (2 x 5)]. Thus, we see that a single-product two-part tariff (one form of nonlinear pricing) bundles the units of the product.

More generally, non-requirements tying, full-line forcing, aggregate rebates, and as well as the implications of this relationship for policy toward tying and bundling supra note 8.
other bundled discounts involve bundling the units of different products in addition to bundling the units of each product. As noted above, in the single product setting, one can show that double marginalization arises from the inability to bundle units of the product. Similarly, in the multiproduct setting involving substitute products (potentially imperfect substitutes), one can show that an analogous distortion—a generalization of double marginalization to the multi-product setting—arises from the inability to bundle across products.17

Contractual solutions to the double marginalization problem—single product case. The elimination of double marginalization (“EDM”) through vertical restraints occurs through the same mechanism as EDM effects from vertical mergers: lowering the effective wholesale price (or the “shadow” wholesale price, as discussed below) to upstream marginal cost, e.g., by setting \( w = c \). The vertical restraints used to accomplish this depend on whether the vertical contract involves single or multiple products.

Consider first the single product case. In environments with complete information and no uncertainty or risk, it is well-known that several different nonlinear tariffs can eliminate double marginalization, including two-part tariffs, all-units discounts, declining block tariffs (of which two-part tariffs are a special case), and quantity forcing (e.g., take-or-pay contracts, which are really a special case of an all-units discount). In addition, fixed-price or maximum RPM can also eliminate double marginalization. All of these contracts work by setting the effective wholesale price, what economists sometimes call the “shadow” price, equal to marginal cost.

A two-part tariff, which involves a linear wholesale price and fixed fee, works by explicitly setting \( w = c \) in the contract so that the downstream firm has the same marginal cost as a vertically integrated firm that can purchase the input at cost. Under this contract, the downstream firm chooses the retail price that maximizes the fully integrated profit.

17 See O’Brien & Shaffer, supra note 8, at 3.
The best the downstream firm can do with a price greater than $50 is a price of $75, which yields a profit of $625 [=(75-50) x 25]. The declining block tariff in text assumes a particular split of the profit. In general, the tariff could also include a fixed fee and a different profit split.

19 See Sreya Kolay, Greg Shaffer & Janusz A. Ordover, All-Units Discounts in Retail Contracts, 13 J. ECON. & MGMT STRATEGY 429 (2004); Daniel P. O’Brien, All-Units Discounts and Double Moral Hazard 170 J. ECON. THEORY 1 (2017).
the price to $49 and wipe out the downstream profits.\textsuperscript{20}

As noted earlier, all vertical restraints that involve eliminating double marginalization do so by setting the effective wholesale price equal to upstream marginal cost. But in the all-units discount just presented, the actual wholesale price paid by the downstream firm is $49, which is far greater than upstream marginal cost of $0. Indeed, $49 is almost as high as the wholesale price of $50 associated with double marginalization. It might be tempting to argue that there is little welfare benefit from the all-units discount because the wholesale price charged in the all-units discount is nearly as high as it is under double marginalization. However, this argument is incorrect.

The reason the argument is wrong is that the relevant price for evaluating the outcome is what economists call the “shadow price” paid by the downstream firm, and this price \textit{does} equal (and is not less than or greater than) upstream marginal cost in any all-units discount that achieves the fully integrated outcome. The shadow price, a term that is likely unfamiliar to antitrust practitioners, is the effective price to the downstream firm of the last unit purchased given both the wholesale price it pays and the constraints embodied in the tariff. The simplest way to think about the shadow price in the context of an all-units discount is that it is the wholesale price that would induce the downstream firm to purchase the quantity it chooses if there were no constraining quantity threshold. Because the chosen quantity in this is example is the quantity that a fully integrated monopolist would choose, the shadow price must equal upstream marginal cost, as that is the wholesale price that induces the downstream firm to behave the same way as a vertically integrated firm. That is, at the quantity chosen under an optimal all-units discount, the shadow price, \textit{is} equal to the upstream firm’s marginal cost.\textsuperscript{21} No inference

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\textsuperscript{20} In more formal economic language, the downstream firm’s marginal revenue is less than its marginal cost of $49 for all quantities of 50 or greater.

\textsuperscript{21} Formally, the downstream firm’s profit maximization problem under an effective all-units discount tariff (one that induces the downstream firm to reach the quantity threshold) is
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about the efficiency of the optimal all-units discount tariff is possible based on the nominal wholesale price, which serves only to transfer surplus. In particular, it would be wrong to conclude from the nominal wholesale price of $49 in this example that there is little benefit from the use of all-units discounts to eliminate double marginalization.

Quantity forcing (or a take-or-pay provision) works the same way as an all-units discount—indeed, these contracts are a special case of an all-units discount with effectively an infinite price for positive quantities less than the quantity threshold.

RPM can eliminate double marginalization by fixing the price rather than quantity at the joint profit maximizing level, which has the same effect. All of these strategies that eliminate double marginalization amount to effectively creating a shadow price for the upstream firm’s product that induces the downstream firm to choose the fully integrated quantity or price.

The discussion thus far has assumed that there is no asymmetric information and no uncertainty or risk. The addition of these factors complicates the analysis in ways that are beyond the scope of this chapter. However, a point worth emphasizing is that the equivalence of two-part tariffs, all-units discounts, quantity forcing, and RPM for the case

$$\max_q (P(Q) - w)Q \text{ s.t. } Q \geq \bar{Q}$$

where $P(Q)$ is inverse demand, $\bar{Q}$ is the quantity above which the all-units discount applies, and $w$ is the wholesale price paid if the purchases reach the quantity threshold $\bar{Q}$. The Lagrangian is

$$L = (P(Q) - w)Q + \lambda(Q - \bar{Q})$$

where $\lambda \geq 0$ is the Lagrangian multiplier. The first order condition, assuming that the constraint binds and the quantity sold is positive, is

$$P'(\bar{Q})\bar{Q} + P(\bar{Q}) - (w - \lambda) = 0.$$  

The “shadow price” paid by the downstream firm for the input is the effective marginal cost that makes it optimal to choose the quantity $\bar{Q}$, which is $w - \lambda$. If the upstream firm chooses $\bar{Q}$ to be the fully integrated quantity, this condition is satisfied when $w - \lambda = c$, i.e., when the shadow price paid for the input is upstream marginal cost. The shadow price facing the downstream firm is less than the observed wholesale price by an amount $\lambda = w - c$. Note that regardless of the value of the nominal wholesale price, if $\bar{Q}$ is the fully integrated quantity, the shadow price equals upstream marginal cost. The level of the nominal wholesale price serves to divide surplus. See O’Brien, supra note 19.
of bilateral contracts under complete information generally does not hold when information is incomplete. To illustrate, suppose demand is uncertain, the upstream firm is risk neutral, but the downstream firm is risk averse. In this case, a nonlinear tariff is not sufficient to achieve the fully integrated outcome. The reason is that optimal risk sharing requires transferring risk to the upstream firm, which requires eliminating the downstream firm’s margin so that it does not bear risk due to demand fluctuations, but it is not possible to eliminate the downstream margin with a nonlinear contract. However, if the fully integrated downstream price does not vary with demand, a maximum RPM contract that eliminates the downstream margin and compensates the downstream firm with a negative fixed fee can achieve the integrated outcome, eliminating double marginalization and optimally sharing risk. If the fully integrated downstream price does vary with demand, RPM combined with a nonlinear tariff is generally more efficient than a nonlinear tariff alone.22

Contractual solutions to double marginalization – multiproduct case. If the upstream and downstream firms contract over multiple products that are substitutes for each other, the equivalence results for the restraints discussed in the single product case no longer hold. The reason has to do with the relationship between double marginalization and bundling, as discussed earlier.

When a multiproduct upstream firm distributes two imperfect substitute products through a downstream retailer, product specific two-part tariffs are insufficient to achieve the fully integrated outcome.23 The intuition for the case of two products, A and B, is as

22 For an analysis of vertical restraints in environments with risk and uncertainty, see Patrick Rey & Jean Tirole, The Logic of Vertical Restraints, 76 AM. ECON. REV. 921 (1986).

23 This result is due to Greg Shaffer, Capturing Strategic Rent: Full-line Forcing, Brand Discounts, Aggregate Rebates, and Maximum Resale Price Maintenance, 39 J. INDUS. ECON. 557 (1991); see also Thibaud Vergé, Multi-product Monopolist and Full-line Forcing: The Efficiency Argument Revisited, 12 ECON. BULL. 1 (2001); Daniel P. O’Brien & Greg Shaffer, Bargaining, Bundling, and Clout: the Portfolio Effects of Horizontal Mergers, 36 RAND J. ECON. 573 (2005); O’Brien & Shaffer, supra note 8.
follows. Product specific two-part tariffs allow the upstream firm to extract the downstream firm’s incremental profit from selling each of products A and B. If the upstream firm tried to extract more, the downstream firm would drop one or both products. However, because products A and B are substitutes, the sum of the downstream firm’s incremental profits from selling A and B is less than the total profit from the sales. This means that product-specific two-part tariffs are insufficient to extract the fully integrated profit. The optimal product-specific two-part tariff generally involves wholesale prices above marginal cost. Intuitively, a small increase in the wholesale price of product A (starting at marginal cost) has a small effect on joint profits (since a price equal to marginal cost maximizes joint profits), but it strictly increases the downstream firm’s incremental profit from selling B. The same is true for a small increase in the wholesale price of product B. Since the upstream firm captures the incremental profits with fixed fees, it increases its profits by raising wholesale prices, creating a double marginalization distortion. This is the multiproduct variant of the double marginalization distortion discussed earlier.

A generalization of the single-product linear demand example to the case of two products helps illustrate the effects of single-product and multi-product double marginalization. Suppose there are two products, 1 and 2, with the following product-specific demands:  

\[ Q_1 = 100 - P_1 + s \times (P_2 - P_1), \]
\[ Q_2 = 100 - P_2 + s \times (P_1 - P_2), \]

where the subscripts indicate products 1 and 2 and s is a substitution parameter between 0 and infinity that reflects the degree of substitution between products 1 and 2. If \( s = 0 \), then the demand for each product depends only on its own price, i.e., the products are

\[ 24 \text{ See Shaffer, supra note 23.} \]
\[ 25 \text{ This demand system is due to Richard Levitan & Martin Shubik, Market Structure and Behavior (1980).} \]
independent in demand. If $s > 0$, products 1 and 2 are imperfect substitutes—an increase in the price of either product raises the demand for the other but does not divert all customers to the other product. As $s$ becomes larger, the products become closer and closer substitutes.\footnote{To see why, observe the reduction in the quantity of product 1 from an increase $\Delta P_1$ is $(1+s)\Delta P_1$. In the limit as $s$ goes to infinity, the reduction becomes infinite, as in the case of perfect competition between perfect substitutes.} In any symmetric outcome where the products have the same equilibrium price, the demand for each product has the same form as the demand function introduced at the beginning of this section, i.e., the demand for product 1 is $Q_1 = 100 - P_1$, the demand for product 2 is $Q_2 = 100 - P_2$, and the reference points for perfect competition and monopoly have the same prices as in the single product case. Thus, the size of the distortion associated with a particular retail price in a symmetric outcome in this multiproduct setting is comparable to the size of the distortion in the single product setting (e.g., a price of $75 causes the same percentage welfare reduction relative to the fully integrated price of $50 in both settings.)

Using the methods in Shaffer,\footnote{See Shaffer, supra note 23.} it is possible to find the equilibrium retail prices when the upstream firm uses product-specific two-part tariffs. Figure 4 plots the equilibrium wholesale and retail prices against the diversion ratio between products 1 and 2.\footnote{The diversion ratio in this example is $Diversion\ Ratio = s/(1 + s)$.} Note first that the wholesale price is $0$ and retail price is $50$ when the diversion ratio is zero, which is the case where products 1 and 2 are independent in demand. This shows that product-specific two-part tariffs—bundling the units of each product but not bundling different products—fully eliminates the double marginalization distortion when the products are independent in demand. This is as expected because the case of two independent demands is the same as having two independent bilateral monopolies, each selling their own product, and two-part tariffs are sufficient to achieve the fully
The more interesting cases occur when diversion ratios are positive. As the diversion ratio approaches 1, where products 1 and 2 become perfect substitutes, the wholesale price rises toward $50 and the retail price rises toward $75. This is the same double marginalization outcome that occurs with linear pricing in the single product case, except that it now occurs with both products. The important point is that double marginalization occurs even though the contract involves two-part tariffs. The size of the double marginalization problem depends on the diversion ratio. When the diversion ratio is small, so that the products are not very close substitutes, product-specific two-part tariffs eliminate most of the double marginalization, and the inability to bundle across products leads to a relatively small additional distortion due to double marginalization. On the other hand, as the products become very close substitutes and the diversion ratio approaches 1 (which is equivalent to perfect substitutes in this example), the double marginalization problem due to the inability to bundle across products is as bad as it is under linear pricing in the single product case!
The reason for this result is that the key economic factor behind double marginalization is the inability to bundle, as explained earlier. In the single product case, double marginalization is a consequence of the seller’s inability to bundle the units of the product, as through nonlinear pricing. In the multi-product case, double marginalization is a consequence of the seller’s inability to bundle the units of each product with each other and with the units of other substitute products. It follows that, contrary to conventional wisdom, nonlinear tariffs are insufficient to solve the double marginalization problem in the multiproduct setting when the products are substitutes. Any solution involving vertical restraints that condition the tariff only on quantities requires some form of tying or bundling both the units of specific products (as with nonlinear pricing) and the units of different products.

It should be noted that the requirement that products are substitutes for the inability to bundle to generate double marginalization does not require that the products are substitutes in final demand. Products that are independent or even somewhat complementary in final demand can be substitutes in the derived demand facing the upstream supplier. For example, scarce shelf space at the retail level can make two products that are independent in final demand substitutes in demand from the upstream firm’s perspective because retailers may substitute between the products in deciding which products to stock.

Shaffer has shown that several vertical restraints can achieve the fully integrated outcome in the multiproduct setting involving substitute products, including full line forcing, aggregate rebates, and maximum RPM. These are equivalent vertical restraints when information is complete. Empirical literature provides support for the prediction that bundling substitute products provides EDM benefits.

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29 O’Brien & Shaffer, supra note 8.
30 Shaffer, supra note 23, at 558.
31 Cf. Justin Ho, Katherine Ho & Julie Holland Mortimer, Analyzing the Welfare Impacts of Full-Line Forcing
The finding that the inability to bundle causes double marginalization has important implications for antitrust policy toward bundled discounts. In *LePages*, the antitrust issue was whether bundled discounts employed by the defendant excluded competitors and harmed competition. Because the inability to bundle substitute products causes double marginalization, a complete analysis of the antitrust question in that case requires balancing benefits from the elimination of double marginalization with any harm due to exclusion. The court in *LePages* did not explicitly consider pro-competitive benefits from the elimination of double marginalization, nor, to my knowledge, has this benefit been considered in other cases involve bundled discounts or tying.

2. Downstream Non-Contractible Investment

Imagine now that in addition to choosing the downstream price, the downstream firm’s stage-two decisions include one or more non-price decisions, such as the amount of advertising or customer service effort, both of which can enhance the demand for the product. Suppose that it is not possible to specify these decisions in a contract. If the upstream firm earns a positive margin, these actions have spillover effects on the upstream firm that the downstream firm will ignore in choosing its own profit-maximizing level of these non-price efforts. Generally, if the upstream margin is positive, the downstream margin will be less than the margin of a fully integrated firm, and the downstream firm will invest less than an integrated firm would invest at any given downstream price.

A contractual solution that eliminates double marginalization by setting the wholesale price equal to upstream marginal cost can also correct the distortion of non-price effort. However, the problem is more complex than the case where the downstream firm’s only stage two decision is price.

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*Contracts*, 60 J. INDUS. ECON. 468, 480 (2012).

32 *LePage’s*, Inc. v. 3M, 324 F.3d 141 (3d Cir. 2003).
In the single product case, a two-part tariff that sets the wholesale price equal to marginal cost still works to achieve the fully integrated outcome. The downstream firm will then have the same incentives as a fully integrated firm and will choose the joint profit-maximizing (fully integrated) levels of price and the non-price actions. Variants of all-units discounts can also work provided the wholesale price charged when the downstream firm fails to purchase the threshold volume is high enough to discourage it from cutting back on investment and raising price. RPM combined with a linear tariff does not work because the wholesale price required to induce the fully integrated downstream investment is marginal cost, but that price that fails to capture any surplus for the upstream firm.

In the multiproduct setting where the products are substitutes, a two-part tariff is not sufficient for the same reason it is not sufficient when the only downstream decisions are prices. However, RPM can be combined with either a two-part tariff or an all-units discount to induce the downstream firm to set the fully integrated price and choose the fully integrated investment levels.

3. Double Moral Hazard

Double moral hazard arises when both the upstream and downstream firms make independent non-contractible decisions that affect the outcome. For example, both the upstream and downstream firms may make investment decisions after the contract is signed that affect the demand for the product. Or the downstream firm may make only a price decision and the upstream firm may make a non-contractible quality decision. Both cases technically involve double moral hazard.

When double moral hazard is present, a dilemma exists that can make it impossible to achieve the fully integrated outcome when contracts are incomplete, i.e., when the downstream price and upstream and downstream investment decisions cannot be specified in the contract. As we’ve seen, the wholesale price that induces the
downstream firm to choose the joint profit maximizing price and quantity under successive monopoly is the upstream firm’s marginal cost. However, a wholesale price equal to marginal cost provides the upstream firm with no incentive at the margin to invest. Raising the wholesale price encourages greater upstream investment, but at the same time it creates double marginalization. Due to this conflict—between encouraging additional upstream investment and mitigating double marginalization—it is often not possible to align both upstream and downstream incentives in a way that induces the fully integrated outcome in the presence of double moral hazard.33

Two papers in the literature address the incentives for and the effects of vertical restraints in the presence of double moral hazard. One paper examines the effects of resale price maintenance when the upstream and downstream firms both make non-contractible demand-enhancing investments and the downstream firm also chooses the final price.34 This model features three vertical externalities, one relating to price and two relating to the firms’ non-price decisions. RPM (sometimes maximum and sometimes minimum) typically mitigates the problem somewhat, but it does not induce the fully integrated outcome. The reason is that even with RPM, the manufacturer has only a two-dimensional incentive device (the wholesale price and retail price) to control three target variables (upstream investment, downstream investment, and the retail price).

The author does not examine the welfare effects of RPM in the model, but it seems clear that welfare effects would be ambiguous for the usual reasons in models that involve non-price decisions. However, it is clear that the use of RPM will often enhance

33 The double moral hazard problem is a special case of a more general problem known as “moral hazard in teams,” which arises when two or more individuals (or firms) exert post-contractual effort that affect the overall gains from trade (the value of the “team”). See Bengt Holmstrom, Moral Hazard in Teams, 13 Bell J. Econ. 324 (1982). Holmstrom showed that any contract with a “balanced budget” (meaning that the upstream firm receives only the tariff it charges the downstream firm) fails to induce efficient levels of investment. Id. at 327.

welfare. For example, in the special case where the downstream firm’s only decision is price, a maximum RPM contract that eliminates the retail margin can eliminate double marginalization and induce the fully integrated level of upstream investment, because the upstream firm then collects the integrated profit and faces the same investment incentives as an integrated firm. This will often enhance welfare, as discussed further below.

Another paper examines the role of all-units discounts to address the double moral hazard problem. The analysis shows that all-units discounts are generally more efficient contracts than two-part tariffs and do as well or better than more complex continuous tariffs (e.g., declining block tariffs with two or more blocks) in environments with double moral hazard. The basic logic is that, unlike two-part tariffs, an all-units discount can eliminate double marginalization with a nominal wholesale price above marginal cost that encourages upstream investment. This is not possible with a two-part tariff because the wholesale price that eliminates double marginalization \((w = c)\) eliminates the upstream margin, discouraging upstream investment. In general, all-units discounts are more efficient than two-part tariffs, and in environments with uncertain demand, they are more efficient than incremental units discounts such as declining block tariffs.

4. Bargaining

In the 1980s, economists began studying the implications of bargaining over the terms of vertical contracts. Bargaining can alter the analysis of vertical restraints substantially in environments with downstream competition (as explained below), but it does not alter the qualitative conclusions in this section about the role of vertical restraints in successive monopoly. For example, suppose the upstream and downstream firms negotiate a linear tariff through symmetric Nash bargaining (discussed in more detail

\footnote{See O’Brien, supra note 19.}
below) and that the only post-contractual downstream decision is the downstream price. If firms’ disagreement profits are zero (meaning they receive zero profits if they fail to agree) and they have no outside options, it can be shown that the Nash bargaining solution in the numerical example in this section yields a wholesale price of $25 and a retail price of $62.50.\footnote{See Daniel P. O’Brien, The Uniform Settlements Policy in International Telecommunications: A Noncooperative Bargaining Model of Intermediate Product 3rd Degree Price Discrimination (1989) (Ph.D. dissertation, Northwestern University) (on file with author) [hereinafter O’Brien Dissertation].} Thus, downstream bargaining power lowers the wholesale price relative to the $50 wholesale price that arises when the upstream firm makes take-it or leave-it (“TIOLI”) offers and thereby reduces the degree of double marginalization, but some double marginalization remains, as the equilibrium retail price ($62.50) still exceeds the fully integrated price ($50). Vertical restraints that achieve the fully integrated outcome under TIOLI offers still do so, and they still lower the downstream price.

Similarly, in the multiproduct setting, bargaining does not alter the results that linear tariffs create double marginalization and that product-specific two-part tariffs are insufficient to achieve the fully integrated outcome because they fail to eliminate fully the double marginalization that arises from the inability to bundle.\footnote{Bilateral bargaining over product-specific two-part tariffs yields the same distortion as the TIOLI offer case considered in Shaffer, supra note 23. See O’Brien & Shaffer, supra note 23.}

5. Welfare Effects

In the symmetric case considered in this section, the welfare effects of vertical restraints are straightforward when the downstream retail price is the only stage two decision. Vertical restraints that achieve the fully integrated outcome lower the retail price and increase welfare relative to situations with double marginalization in both single product and multiproduct settings.

When non-price decisions are in the mix, the welfare effects of vertical restraints that increase joint profits are theoretically ambiguous. The reason is that the joint prof-
maximizing choice of the non-price attribute may be higher or lower than the socially
optimal choice, depending on the nature of demand curvature. However, under some
standard assumptions commonly used in applications, vertical restraints typically
increase welfare.

Specifically, suppose that marginal cost is constant and the final demand for the
product exhibits constant curvature, a special case of which is linear demand.38 Suppose
further that changes in upstream or downstream investment shift or rotate demand
without altering its curvature. Under these assumptions, vertical restraints increase
consumer and total welfare relative to the case with no vertical restraints.

This result is explained in steps as follows. Start from the double marginalization
outcome that arises in the absence of vertical restraints. Allow the negotiating firms to
introduce a fixed fee that divides profits. Note that the introduction of a fixed fee does
not change consumer surplus or total welfare. Now suppose the firms re-optimize by
choosing a new contract with vertical restraints that achieves the fully integrated price
and investment levels. Under constant curvature demand and constant marginal cost,
consumer surplus and profits vary in a constant proportion to each other as the seller
optimally adjusts price in response to changes in non-price attributes that shift or rotate
demand (e.g., demand-enhancing retail services).39 This means that any change in price
and the investment that increases joint profits also increases consumer surplus. Because
any vertical restraints agreed to by the upstream and downstream firms must increase
joint profits (otherwise they would not make the change), the vertical restraint also

38 Constant curvature means that as price changes, the curvature of demand, as measured by $-Q''/Q'$, does
not change. Other commonly used demand curves with constant curvature include constant elasticity and
semi-log demand. See Jeremy I. Bulow & Paul Pfleiderer, A Note on the Effect of Cost Changes on Prices, 91 J.

39 See Daniel P. O’Brien & Doug Smith, Privacy in Online Markets: A Welfare Analysis of Demand Rotations 4
increases consumer surplus. It follows that under constant marginal cost and constant curvature demand, vertical restraints increase consumer surplus, profits, and total welfare.

In an amicus brief filed in the *Leegin* case, the authors argued that it is possible that the use of vertical restraints to promote downstream investment would lead to suboptimal investment levels.\(^{40}\) As a theoretical matter, vertical restraints can lead to over- or under-investment in services relative to the socially optimal levels. However, the preceding analysis shows that in the bilateral setting, vertical restraints raise both consumer and total welfare under the simplest textbook assumptions—linear demand and constant marginal cost. Departures from this prediction require sufficiently large departures from the constant curvature assumption in a specific direction. In any case, the argument that vertical restraints can theoretically distort investment upward or downward, depending on demand curvature, is not an argument against the Supreme Court’s decision in *Leegin* to adopt a rule-of-reason standard for the antitrust treatment of RPM.

In the same Amicus, the authors argue that “[t]o the extent that the economic literature provides support for resale price maintenance as welfare-enhancing, the support is limited to cases of manufacturer-induced RPM, not retailer-induced RPM . . . Retailer-induced RPM should give rise to a rebuttable *per se* approach.”\(^{41}\) Yet, both the upstream and downstream firms share the same interest in vertical restraints that induce the fully integrated outcome because they can divide the maximized joint profits with a fixed transfer payment. Economic theory does not support a rebuttable *per se* approach for vertical restraints just because one or more retailers benefit from their use.


\(^{41}\) *Id.* at 2.
B. Downstream Competition

I now turn to situations where U1 contracts with multiple downstream firms who may compete with one another. In terms of the bubble diagram in Figure 2, think of the contacts and decisions involving U2’s products as fixed.

It is important to recognize that conditional on U1’s contract with D2, the issues discussed in the preceding section on contracting between successive monopolists remain relevant in the contracts between U1 and D1, and vice versa. That is, contract efficiency considerations remain important. However, the additional externalities associated with downstream competition raise additional considerations that affect the analysis. Important considerations include the presence of service externalities across retailers, whether contracting is bilateral or multilateral, and the observability of contracts.

1. No Non-Contractible Investments; No Bilateral Contracting

To fix ideas, suppose that upstream firm U1 sells through \( N \) downstream firms that are Cournot competitors in the downstream market. (Under Cournot competition, each firm chooses its own quantity to maximize profits taking as given its competitors’ quantities.) Absent vertical restraints, double marginalization remains an issue. If U1 offers TIOLI linear tariffs in the illustrative example in Figure 3, it can be shown that it will charge a wholesale price of $50 irrespective of the number downstream firms. The retail price depends on the intensity of downstream competition, as shown in Table 1. If there is only 1 downstream firm, the outcome involves successive monopoly and a downstream price of $75. Greater downstream competition \((N > 0)\) lowers the retail price, but in this example the wholesale price remains at $50. As the market becomes more and more competitive, double marginalization gradually disappears. The remaining distortion relative to the perfectly competitive outcome arises from “single marginalization” due to U1’s market power in the upstream market.
Vertical restraints in this case, as in the bilateral monopoly case, seek to eliminate double marginalization and lower the retail price to the fully integrated level. One approach that works is a set of two-part tariffs that induce downstream competitors to choose the fully integrated monopoly price of $50 as the outcome of downstream competition. The wholesale price that does this depends on the number of downstream competitors. This wholesale price is zero when there is one downstream firm and rises from $0 to $50 as the number of downstream firms grows toward infinity, which generates the perfectly competitive outcome in the downstream market.

Observe that the greater the degree of market power in the downstream market as reflected by a smaller number of competitors, the greater the welfare benefit from vertical restraints that achieve the fully integrated outcome. This is the first of several examples throughout this section that show why market power screens are less useful in the analysis of vertical restraints and mergers than they are in the analysis of horizontal mergers. Generally, market power at one or both levels is necessary but not sufficient for
harm to arise from vertical restraints or mergers.

A similar situation occurs when the upstream firm offers TIOLI linear tariffs to downstream differentiated Bertrand competitors. (Under Bertrand competition, each firm chooses its own price to maximize profits taking as given their rivals’ prices.) For simplicity, suppose there are two Bertrand competitors with the linear differentiated demands introduced earlier. Recall that the products are independent in demand when $s = 0$, and they become closer substitutes as $s$ increases. To aid intuition, it is convenient to measure the degree of substitution and thus the intensity of downstream competition by the diversion ratio between the competitors rather than the substitution parameter. The diversion ratio in this example is $\text{Diversion Ratio} = s/(1 - s)$.

Table 2 shows how the outcome under TIOLI linear tariffs compares with the fully integrated outcome for different values of the diversion ratio. As in the case of downstream Cournot competition, the equilibrium wholesale price exceeds the price that induces the fully integrated outcome except in the extreme case where downstream firms are perfectly competitive, which occurs when the diversion ratio approaches 1. Thus, vertical restraints that achieve the fully integrated outcome reduce price and increase welfare relative to the case of no vertical restraints, and this effect is larger the greater the degree of downstream market power as reflected by a smaller diversion ratio.
Table 2 provides useful insight into one of the policy debates in the commentary and discussion surrounding the 2020 Vertical Merger Guidelines issued in the summer of 2020 in the U.S. The issue is the merger specificity of cost savings from eliminating the wholesale margin when nonlinear tariffs are employed prior to a vertical merger. An argument often made is that nonlinear tariffs between the merging firms prior to the merger eliminate EDM benefits. Although it is true that nonlinear pricing can eliminate double marginalization (at least in the single product case), observe that the wholesale prices that induce the fully integrated outcome in Table 2 exceed marginal cost in every case except downstream monopoly. This means that if the upstream firm can make TIOLI nonlinear contract offers prior to the merger, a vertical merger still creates cost savings from eliminating the upstream margin, which lowers the downstream firm’s marginal cost and retail price. As long as the wholesale price exceeds marginal cost, this benefit,

<table>
<thead>
<tr>
<th>Diversion Ratio</th>
<th>Wholesale Price that Induces the Fully Integrated Outcome</th>
<th>Equilibrium Wholesale Price</th>
<th>Equilibrium Retail Price</th>
<th>% Welfare Gain from Vertical Restraints that Achieve the Integrated Outcome</th>
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</thead>
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<td>0.00</td>
<td>0.00</td>
<td>50.00</td>
<td>75.00</td>
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<td>73.68</td>
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<td>72.22</td>
<td>57%</td>
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<td>50.00</td>
<td>68.75</td>
<td>42%</td>
</tr>
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<td>50.00</td>
<td>66.67</td>
<td>35%</td>
</tr>
<tr>
<td>0.60</td>
<td>30.00</td>
<td>50.00</td>
<td>64.29</td>
<td>28%</td>
</tr>
<tr>
<td>0.70</td>
<td>35.00</td>
<td>50.00</td>
<td>61.54</td>
<td>21%</td>
</tr>
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<td>0.80</td>
<td>40.00</td>
<td>50.00</td>
<td>58.33</td>
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</tr>
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<td>50.00</td>
<td>50.00</td>
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<td>0%</td>
</tr>
</tbody>
</table>

42 See Vertical Merger Guidelines, supra note 9, at 12.

Electronic copy available at: https://ssrn.com/abstract=3733686
which is similar to the benefit from EDM, exists.\textsuperscript{43}

A point that is often missed in vertical merger discussions is that if the upstream firm sells through TIOLI nonlinear contracts prior to merging with a differentiated downstream Bertrand competitor, such a merger would not achieve the integrated outcome and would be unprofitable absent some efficiency benefit. The reason is that by vertically merging, the upstream firm loses the ability to use the wholesale price with the integrating downstream firm to soften competition. If there are two downstream firms, for example, it generally takes two incentive devices (here two wholesale prices) to induce downstream firms to charge the fully integrated downstream prices.\textsuperscript{44} However a merger between U1 and D1 takes one of the incentive devices off the table because the integrated firm cannot credibly pretend to pay itself a wholesale price above marginal cost. This prevents the use of nonlinear tariffs to achieve the fully integrated outcome. The full effects of the merger in this case are found by weighing the benefit to the integrating firm from eliminating the upstream margin against any increase in the wholesale prices charged to unintegrated downstream firms.

In contrast to the Bertrand case, in the Cournot case illustrated in Table 1, a vertical merger does induce the fully integrated outcome, just like a TIOLI nonlinear tariff. The reason is that under the assumption of constant marginal cost and no product differentiation, the merged firm can achieve the fully integrated outcome with only a single downstream seller.\textsuperscript{45}

\textsuperscript{43} This benefit technically is not EDM, although it is sometimes referred to that way. When the upstream firm uses nonlinear tariffs in this case, the positive upstream margin is not due to double marginalization caused by the absence of bundling, but instead exists to soften downstream competition and thereby achieve the fully integrated outcome.

\textsuperscript{44} This logic traces to G. Frank Mathewson & Ralph Winter, An Economic Theory of Vertical Restraints, 15 RAND J. ECON. 27 (1984).

\textsuperscript{45} An integrated firm could achieve the fully integrated outcome by charging a retail price of $50 and charging unintegrated downstream firms a wholesale price of $50 (or more generally $50 minus downstream production marginal cost) to capture the fully integrated profit.
2. Downstream Non-Contractible Investments, No Bilateral Contracting

Several papers have examined the effects of nonlinear pricing, RPM, and ET when competing downstream firms make both price and non-contractible non-price decisions that affect final demand. Telser’s seminal paper focused on the situation where downstream firms compete on price and by offering a non-price service at no explicit charge that increases the value of the product to consumers. He showed that if consumers can obtain the service from one retailer but then purchase the product at a lower price from another retailer who does not provide the service (“free riding”), the incentive for retailers to provide the service is reduced and may disappear entirely. He then showed how RPM and ET can overcome this problem to ensure that valuable pre-sale services are provided in the market.

Mathewson and Winter developed a formal model that encompasses the externalities present in Telser’s model. They examine in detail how a manufacturer that can credibly commit to tariffs that are observable to all downstream firms and are not bilaterally renegotiated can achieve the vertically integrated outcome with various combinations of two-part tariffs, RPM, and ET.

Mathewson and Winter derive strong results for the case where each downstream firm’s strategic decisions include price and a non-price decision (e.g., advertising) that affects demand. In one case they consider, each downstream firm’s advertising decision affects only its own demand. In another case, advertising by one downstream firm causes “spillovers” that benefit other downstream firms. The latter case involves a degree of free riding that formalizes the type of free-riding introduced by Telser. For these cases, Mathewson and Winter derive the following results:

• When there are no advertising spillovers, nonlinear tariffs alone are insufficient to achieve the fully integrated outcome. Closed territory distribution (a strong form of ET) combined two-part tariffs, and minimum RPM with two-part tariffs are sufficient to achieve the fully integrated outcome.

• When there are advertising spillovers, closed territory distribution combined with two-part tariffs is no longer sufficient to achieve the fully integrated outcome. Minimum RPM combined with two-part tariffs is sufficient.

The welfare implications of Telser’s and Mathewson and Winter’s results are ambiguous in theory. However, as in the successive monopoly case discussed earlier, if demand has constant curvature, marginal cost is constant, and downstream firms are symmetric, vertical restraints increase welfare.

It is important to emphasize that the absence of bilateral contracting is critical for these results. Both the Telser and Mathewson and Winter models assume, consistent with virtually all of the literature on vertical restraints prior to 1990, that the upstream firm can credibly commit to contract offers that it will not renegotiate bilaterally and that downstream firms can observe (or learn or infer) the terms of their rivals’ contracts. The alternative assumption that contracts are determined bilaterally (and may potentially be secret) can lead to quite different conclusions, as discussed in the next section. This is another in a long list of reasons why policy toward vertical restraints is difficult— theoretical predictions are sensitive to key assumptions. Moreover, there is a paucity of empirical literature that provides a basis for choosing between different modelling assumptions that can be important for the predictions.

3. Bilateral Contracting Externalities

In many vertical chains, firms bilaterally negotiate their contracts. This section shows that bilateral negotiations have important implications for the effects of both vertical restraints and mergers. There are three main cases to consider: (a) bargaining
over linear tariffs; (b) bargaining over observable nonlinear tariffs; and (c) bargaining over unobservable nonlinear tariffs.

a. Bargaining Over Linear Tariffs

In successive monopoly (examined earlier), downstream bargaining power leads to lower wholesale prices and less double marginalization than when the upstream firm offers linear tariffs on a TIOLI. However, because downstream bargaining power does not eliminate double marginalization altogether, vertical restraints that achieve the fully integrated outcome eliminate a degree of double marginalization and reduce wholesale and retail prices.

The presence of downstream competitors adds another factor—bilateral contracting externalities that arise because the wholesale price in the contract between the upstream firm and each downstream firm affects the outcome of downstream competition and therefore affects the profits of other downstream firms. As we’ll see, whether the vertical restraints raise or lower prices and welfare can depend on the pre-merger market structure, the nature of downstream competition, and the details of the bargaining process and vertical contracts.

The most common way to model bilateral bargaining in settings with multiple downstream firms is with the simultaneous Nash bargaining solution, which has come to be known as “Nash-in-Nash bargaining.” In this approach, each downstream firm

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48 The simultaneous Nash bargaining solution has recently been used in several vertical merger investigations, most recently the AT&T-Time Warner merger that was tried in federal district court. O’Brien developed this solution to study the effects of prohibiting price discrimination in intermediate good markets where input prices are negotiated. See O’Brien Dissertation, supra note 36; and Daniel P. O’Brien, The Welfare Effects of Third-Degree Price Discrimination in Intermediate Good Markets: The Case of Bargaining, 45 RAND J. ECON. 92 (2014). Horn and Wolinsky independently developed and applied this solution to mergers, Henrick Horn & Asher Wolinsky, Bilateral Monopolies and Incentives for Merger, 19 RAND J. ECON. 408 (1988), and Davidson independently developed it and applied this solution to labor market negotiations, Carl Davidson, Multiunit Bargaining in Oligopolistic Industries, 6 J. LAB. ECON. 397 (1988). Davidson (1988) and O’Brien (1989, 2014) provide non-cooperative foundations for this solution concept based on extensions of the alternating offer bargaining model of Ariel Rubinstein, Perfect Equilibrium in a
negotiates a linear wholesale price with the upstream firm through Nash bargaining taking the other wholesale prices as given. The outcome of Nash bargaining over linear tariffs generally depends on four factors: (i) the size of the incremental loss that each bargaining party can impose on the other from delaying or refusing agreement, which depends on the profits from agreement and disagreement (the latter is referred to as the “disagreement profit”); (ii) the curvature of the negotiating firms’ profits in price, which affects firms’ relative costs of making small price concessions during bargaining; (iii) the availability of outside options, which may differ from disagreement profits; and (iv) in the case of asymmetric Nash bargaining, the firms “bargaining weights,” which reflect their intrinsic bargaining power. All four factors are important. In addition, the predictions from simultaneous Nash bargaining over linear tariffs generally depend on


It should be noted that the simultaneous Nash bargaining solution (or “Nash-in-Nash” solution) frequently is not the only solution to alternating offer bargaining games in environments with multiple downstream firms. For example, in the case of a single upstream firm and two downstream firms negotiating a linear price, there can be asymmetric equilibria in which the upstream firm and one of the downstream firms recognize (and act on this recognition) that they will bargain to reach agreement first, and that the upstream firm and the other downstream firm will bargain to reach agreement second. In this equilibrium, only the 2nd agreement is a Nash bargaining solution that takes the other agreement as given. The wholesale price in the first agreement solves a Nash bargaining solution that looks ahead and accounts for how the wholesale price in the second agreement will adjust in response to the price chosen in the first agreement. This was also recognized by Horn and Wolinsky, surpra note 48.

the nature of downstream competition, the downstream market structure, and the timing of pricing decisions. I present three examples illustrating these points.

_Downstream Cournot Competition._ Suppose first that the downstream market consists of \( N \) Cournot competitors (the case where \( N = 1 \) is the successive monopoly case considered above). Assume that each downstream firm’s disagreement profit is zero, and the upstream firm’s disagreement profit in its negotiations with one downstream firm is the profit it earns from its contract with other firms when they operate in a Cournot equilibrium conditional on the disagreeing downstream firm producing zero.\(^51\) Finally, assume that firms have no outside options and equal bargaining weights, which means that the solution in each bilateral bargaining situation is the symmetric Nash bargaining solution.

In the linear example we have been using, it can be shown that the wholesale price that solves the simultaneous Nash bargaining solution is \( w = 25 \) irrespective of the number of downstream firms.\(^52\) This result has strong implications for the effects of vertical restraints that achieve the fully integrated outcome.

Table 3 shows how the wholesale price that induces the fully integrated outcome and the equilibrium wholesale and retail prices under simultaneous Nash bargaining vary with the number of downstream firms.

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\(^{51}\) As Horn and Wolinsky, _supra_ note 48, pointed out, there are other reasonable assumptions about the quantities of firm 1’s competitors when firm 1 is in a state of disagreement, and the equilibrium solution can depend on these assumptions.

\(^{52}\) See O’Brien Dissertation, _supra_ note 36. The prediction that price does not change at all with the number of downstream firms is an artifact of linearity, but a general result is that the wholesale price remains below the level that induces the fully integrated retail price regardless of the number of downstream Cournot competitors. See O’Brien Dissertation, _supra_ note 36; O’Brien (2014), _supra_ note 48.
Observe that the wholesale price that induces the fully integrated outcome is less than the wholesale price that emerges from bargaining when there are two or fewer downstream firms, but it is greater than the negotiated price when there are three or more downstream firms. This means that the downstream price under simultaneous Nash bargaining is lower than the fully integrated downstream price if there are three or more firms. It follows that vertical restraints that induce the fully integrated outcome raise price when there are three or more downstream firms.

The main factor driving this result is that the negotiated wholesale price remains below the level required to achieve the fully integrated outcome even as the number of downstream firms grows. Many find this result counterintuitive—why doesn’t the upstream firm gain bargaining strength as the downstream market becomes more competitive? The reason is that in bilateral bargaining, each firm’s bargaining power derives in large part from the size of the loss it can impose on the firm it is bargaining with by delaying or refusing agreement. As the downstream market becomes more competitive, the upstream firms’ profit from an incremental agreement falls, reducing the loss each downstream firm can impose on the upstream firm by delaying or refusing agreement.

Electronic copy available at: https://ssrn.com/abstract=3733686
agreement. But at the same time, each downstream firm’s profit falls, reducing the loss that the upstream firm can impose on each downstream firm by delaying or refusing agreement. As the number of downstream firms grows—which in the Cournot model means the downstream market becomes more competitive—the relative losses the bargainers can impose on each other by delaying or refusing agreement both fall such that the wholesale price that “balances” these losses according to Nash bargaining remains below the level that achieves the fully integrated outcome. It follows that vertical restraints or integration that achieve the fully integrated outcome raise the downstream price when the downstream market is sufficiently competitive.

A vertical merger between U1 and one of the downstream firms restores the fully integrated outcome in this model because downstream firms are homogenous and there are constant returns to scale. The vertically integrated firm can achieve the fully integrated outcome by credibly negotiating a wholesale price high enough and set a retail price low enough to prevent unintegrated downstream rivals from capturing profits. Thus, a vertical merger in this model is equivalent to vertical restraints that achieve the fully integrated outcome, and both raise price in this model as long as there are three or more downstream firms.

An obvious caveat is that this example assumes that that downstream firms do not make non-contractible investments. If downstream non-contractible investments are important, vertical restraints that achieve the fully integrated outcome could involve lower wholesale prices that raise the downstream firm’s margin and induce greater downstream investment, which would likely increase welfare. A second obvious caveat is that the example assumes that the upstream firm faces no competition. Suppose, alternatively, that downstream firms have the option during bargaining to leave the bargaining table and agree to purchase the input a price of $24 from another supplier, a price well above upstream marginal cost, but slightly below the price they negotiate when
there is no outside option. In this case, the outside option principle\(^{53}\) implies that unintegrated downstream firms pay $24 prior to the adoption of vertical restraints or vertically merging. Unless either strategy somehow relaxes the binding outside option constraint, neither strategy could increase the wholesale price to unintegrated downstream firms. In this case, vertical restraints or merger would likely be procompetitive by eliminating double marginalization between the merging firms.

**Downstream Bertrand Competition.** Next, suppose that downstream firms are differentiated Bertrand competitors. For simplicity, I discuss the case with two downstream firms.

Table 4 shows how the wholesale price that induces the fully integrated outcome and the equilibrium wholesale and retail prices under simultaneous Nash bargaining vary with the diversion ratio in the absence of vertical restraints.

**Table 4: Simultaneous Nash Bargaining Over Linear Wholesale Prices: Downstream Differentiated Bertrand Competition**

<table>
<thead>
<tr>
<th>Diversion Ratio</th>
<th>Wholesale Price that Induces the Fully Integrated Outcome</th>
<th>Wholesale Price under Simultaneous Nash Bargaining</th>
<th>Retail Price under Simultaneous Nash Bargaining</th>
<th>% Welfare Gain from Vertical Restraints that Achieve the Integrated Outcome</th>
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</thead>
<tbody>
<tr>
<td>0.00</td>
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<td>25.00</td>
<td>62.50</td>
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</tr>
<tr>
<td>0.10</td>
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<td>18%</td>
</tr>
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<td>24.70</td>
<td>58.16</td>
<td>13%</td>
</tr>
<tr>
<td>0.30</td>
<td>15.00</td>
<td>24.25</td>
<td>55.44</td>
<td>8%</td>
</tr>
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</tr>
<tr>
<td>1.00</td>
<td>50.00</td>
<td>0.00</td>
<td>0.00</td>
<td>-25%</td>
</tr>
</tbody>
</table>

The same general forces are at work in the Bertrand case as in the Cournot case: (i) downstream bargaining power lowers the wholesale price, although it does not eliminate double marginalization except when the diversion ratio is one, and (ii) greater downstream competition (as measured by a higher diversion ratios in the Bertrand case) lowers the losses that both bargaining parties can inflict on each other by delaying or refusing agreement, with the result that the negotiated wholesale price is generally below the $50 level that arises under TIOLI offers. As in the Cournot case, when the downstream market is sufficiently competitive, the negotiated wholesale price is lower than the price that induces the fully integrated outcome. It follows that if the downstream market is sufficiently competitive, vertical restraints that achieve the fully integrated outcome raise the downstream price.

Of course, the same caveats apply as in the Cournot case: the analysis abstracts from non-contractible downstream investment and upstream competitive alternatives.

The timing of wholesale and retail pricing. In the bargaining models just discussed, the wholesale price is determined prior to the retail price, and the negotiating firms anticipate the effect of adjustments to the wholesale price during bargaining on the retail price. This timing is consistent with virtually all of the literature on vertical control from Spengler’s seminal paper through the first application of bargaining models to vertical contracting. For reasons that are not entirely clear, however, much of the recent literature and many policy applications of simultaneous Nash bargaining between upstream and downstream firms assumes that retail prices are set simultaneously with wholesale prices. This means that when considering whether to adjust the wholesale

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54 The models of O’Brien, Horn and Wolinsky, and Davidson, supra note 48, all assume that wholesale prices are determined before retail prices and that the bargaining parties rationally look ahead to the impact of changes in wholesale prices on retail prices, as in virtually all models of vertical contracting since Spengler’s seminal paper.

55 A possible reason some of the literature has gone this direction is that the assumption simplifies both the theoretical and empirical analysis and sometimes yields simple formulas for equilibrium prices. See, e.g.,
price in negotiations, the bargaining firms assume that any adjustment would not affect the retail price. This was the assumption, for example, in the bargaining analysis presented by the Plaintiff’s expert in the AT&T-Time Warner merger trial, the first vertical merger tried in federal court in decades, and in several other recent applications.\footnote{Id. at 427–28.}

In bargaining models where the wholesale and retail prices are determined simultaneously, the effect of a vertical merger comes entirely through its impact on the upstream firm’s disagreement profit, which is the amount it earns during a bargaining impasse (or “blackout”). The model ignores the traditional source of input foreclosure—raising the wholesale price to unintegrated downstream firms (raising rivals’ costs) for the purpose of shifting business to the integrated firm’s downstream division—making it impossible to isolate the effect of bargaining on predictions relative to traditional foreclosure models with TIOLI contracting. And in most contracting environments, downstream firms can adjust retail prices in response to changes in their wholesale prices, and it is hard to see why negotiating parties would fail to anticipate such adjustments during negotiations.

The assumption that wholesale and retail prices are determined simultaneously rather than sequentially is not innocuous. For example, in the illustrative linear example used in this section (with symmetric, Levitan-Shubik demand and constant marginal cost), it can be shown that a vertical merger always reduces price.\footnote{This is true when the upstream firm’s profit during a bargaining impasse with one downstream firm is the profit it earns from the other downstream firm when that firm charges its anticipated equilibrium price, as assumed in most of the literature.} As Table 4 indicates, this is not the case when the wholesale and retail prices are determined sequentially, as in the standard vertical contracting model.

In my discussion of linear price bargaining in this section, I focused on models

\begin{flushright}
\end{flushright}
where wholesale and retail prices are determined sequentially for three reasons. First, this assumption is a more accurate reflection of reality in most markets. Simplicity does not seem to be an especially good basis for an incorrect assumption that matters. Second, it avoids the illogical (and therefore untenable) assumption that firms fully anticipate the retail price effect of the effective wholesale price increase that occurs during an impasse (which drives the effective retail price of the impasse product to infinity) but completely ignore the retail price effect of other changes in wholesale prices. Third, it permits isolating the effects of bargaining on vertical contracting relative to the TIOLI case, which advances our understanding of the role of bargaining in vertical contracting.

b. Bargaining Over Observable Nonlinear Tariffs

The preceding section discussed bargaining over linear wholesale prices. However, in many intermediate markets, firms negotiate nonlinear tariffs. This section explains the implications for vertical restraints of such negotiations when downstream firms can observe (or learn) their rivals’ wholesale prices. For this discussion, I focus on the case of two downstream Bertrand competitors.

Recall that when U1 can offer TIOLI nonlinear tariffs to D1 and D2 and commit not to renegotiate them, it has an incentive to choose the wholesale price that induces the fully integrated downstream price as the outcome of downstream competition. The reason for this is that U1 can capture the maximized joint profits (the fully integrated joint profits) with a fixed transfer. However, when U1 and D1 negotiate nonlinear tariffs bilaterally, they have a bilateral incentive to choose a wholesale price that maximizes their bilateral profits and then divide these profits with a transfer payment. Because bilateral profits do not include the rival downstream firm’s profits, an externality is present. To understand the externality, suppose the current wholesale price is \( w' \), the price that induces the fully integrated downstream price. In bilateral negotiations, U1 and D1 have an incentive to negotiate a lower wholesale price bilaterally because it causes D1 to lower
its retail price to attract customers from D2, increasing the \emph{bilateral} profits of U1 and D1. Similarly, at the wholesale price $w^l$, U1 and D2 have an incentive to negotiate bilaterally a lower wholesale price to steal business from D1 and increase their bilateral profits. When these incentives are taken into account in simultaneous Nash bargaining, equilibrium wholesale prices end up below $w^l$, i.e., below the level that induces the fully integrated downstream price. This means that vertical restraints that achieve the fully integrated outcome raise the retail price.

Table 5 shows how the wholesale price that induces the fully integrated outcome and the negotiated wholesale and retail prices vary with the diversion ratio. In this case, the bilateral contracting externality leads to a wholesale price below the price that induces the fully integrated outcome for all values of the diversion ratio. Thus, the model predicts that vertical restraints that achieve the fully integrated outcome raise retail prices, with the same caveats in the previous bilateral contracting models (the model ignores downstream non-contractible investment and upstream competition).
Table 5: Simultaneous Nash Bargaining Over Observable Nonlinear Tariffs: Downstream Differentiated Bertrand Competition

<table>
<thead>
<tr>
<th>Diversion Ratio</th>
<th>Wholesale Price that Induces the Fully Integrated Outcome</th>
<th>Wholesale Price under Simultaneous Nash Bargaining Over Nonlinear Tariff</th>
<th>Retail Price under Simultaneous Nash Bargaining Over Nonlinear Tariff</th>
<th>% Welfare Gain from Vertical Restraints that Achieve the Integrated Outcome</th>
<th>% Welfare Gain from Nonlinear Tariffs Relative to Linear Tariffs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.00</td>
<td>50.00</td>
<td>0.00</td>
<td>0%</td>
<td>23%</td>
</tr>
<tr>
<td>0.1</td>
<td>5.25</td>
<td>47.50</td>
<td>47.50</td>
<td>-3%</td>
<td>22%</td>
</tr>
<tr>
<td>0.2</td>
<td>10.00</td>
<td>45.00</td>
<td>45.00</td>
<td>-6%</td>
<td>21%</td>
</tr>
<tr>
<td>0.3</td>
<td>15.25</td>
<td>42.50</td>
<td>42.50</td>
<td>-8%</td>
<td>18%</td>
</tr>
<tr>
<td>0.4</td>
<td>20.00</td>
<td>40.00</td>
<td>40.00</td>
<td>-11%</td>
<td>15%</td>
</tr>
<tr>
<td>0.5</td>
<td>25.00</td>
<td>37.50</td>
<td>37.50</td>
<td>-13%</td>
<td>12%</td>
</tr>
<tr>
<td>0.6</td>
<td>30.00</td>
<td>35.00</td>
<td>35.00</td>
<td>-15%</td>
<td>8%</td>
</tr>
<tr>
<td>0.7</td>
<td>35.00</td>
<td>32.50</td>
<td>32.50</td>
<td>-16%</td>
<td>4%</td>
</tr>
<tr>
<td>0.8</td>
<td>40.00</td>
<td>30.00</td>
<td>30.00</td>
<td>-18%</td>
<td>0%</td>
</tr>
<tr>
<td>0.9</td>
<td>45.00</td>
<td>27.50</td>
<td>27.50</td>
<td>-19%</td>
<td>-4%</td>
</tr>
<tr>
<td>1</td>
<td>50.00</td>
<td>25.00</td>
<td>25.00</td>
<td>-20%</td>
<td>-6%</td>
</tr>
</tbody>
</table>

However, the model also shows that relative to the case of simultaneous Nash bargaining with no vertical restraints, bargaining over a two-part tariff—a vertical restraint that can eliminate double marginalization—increases welfare for all cases except those in the bottom two rows in the table, which involve high diversion ratios and nearly perfect competition in the downstream market.

These findings illustrate the importance of specifying the appropriate counterfactual when evaluating the effects of vertical restraints. In this example, if firms employ vertical restraints that achieve the fully integrated outcome and the counterfactual is simultaneous Nash bargaining over two-part tariffs, then the restraints raise price (assuming the absence of downstream investment and upstream competition). On the other hand, if the restraint in question involves the use of a nonlinear tariff and the counterfactual involves a linear tariff, then the restraint lowers price in most of the cases considered here.
c. Bargaining Over Unobservable Nonlinear Tariffs

The last case I consider is when the upstream firm negotiates bilateral nonlinear tariffs that are not observed by the downstream firm’s rivals. In this case, bilateral contracting externalities can be severe.\(^\text{58}\) In particular, if downstream firms believe that their rivals’ wholesale prices do not change in response to changes in their own wholesale prices (“passive beliefs”),\(^\text{59}\) then bilateral contracting leads to wholesale prices equal to upstream marginal cost. In this case, the upstream monopolist is unable to soften competition at all using the wholesale price in the absence of vertical restraints. The outcome grows worse for all firms (their profits decline) the more intensely downstream firms compete. This is shown in Table 6 which displays the same information as Table 5 except with a negotiated wholesale price equal to marginal cost for all values of the diversion ratio.

Table 6 shows that in the case of secret contracts, where bilateral contracting externalities can be especially severe and welfare losses from sufficient vertical restraints can be large, the benefits from the use of nonlinear contracting to solve double marginalization increases welfare for all diversion ratios. Again, this illustrates the importance of evaluating the effects of vertical restraints against an appropriate counterfactual.


\(^{59}\) Although this assumption is made in much of the bilateral contracting literature and it is in the spirit of simultaneous Nash bargaining, the justification for this assumption is open to debate.
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Table 6: Simultaneous Nash Bargaining Over Unobservable Nonlinear Tariffs:
Downstream Differentiated Bertrand Competition
Passive Beliefs

<table>
<thead>
<tr>
<th>Diversion Ratio</th>
<th>Wholesale Price that Induces the Fully Integrated Outcome</th>
<th>Wholesale Price under Simultaneous Nash Bargaining</th>
<th>Retail Price under Simultaneous Nash Bargaining</th>
<th>% Welfare Gain from Vertical Restraints that Achieve the Integrated Outcome</th>
<th>% Welfare Gain from Nonlinear Tariffs Relative to Linear Tariffs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>50.00</td>
<td>0%</td>
<td>23%</td>
</tr>
<tr>
<td>0.1</td>
<td>5</td>
<td>0.00</td>
<td>47.37</td>
<td>-3%</td>
<td>22%</td>
</tr>
<tr>
<td>0.2</td>
<td>10</td>
<td>0.00</td>
<td>44.44</td>
<td>-7%</td>
<td>21%</td>
</tr>
<tr>
<td>0.3</td>
<td>15</td>
<td>0.00</td>
<td>41.18</td>
<td>-10%</td>
<td>20%</td>
</tr>
<tr>
<td>0.4</td>
<td>20</td>
<td>0.00</td>
<td>37.50</td>
<td>-13%</td>
<td>18%</td>
</tr>
<tr>
<td>0.5</td>
<td>25</td>
<td>0.00</td>
<td>33.33</td>
<td>-16%</td>
<td>16%</td>
</tr>
<tr>
<td>0.6</td>
<td>30</td>
<td>0.00</td>
<td>28.57</td>
<td>-18%</td>
<td>13%</td>
</tr>
<tr>
<td>0.7</td>
<td>35</td>
<td>0.00</td>
<td>23.08</td>
<td>-21%</td>
<td>10%</td>
</tr>
<tr>
<td>0.8</td>
<td>40</td>
<td>0.00</td>
<td>16.67</td>
<td>-23%</td>
<td>7%</td>
</tr>
<tr>
<td>0.9</td>
<td>45</td>
<td>0.00</td>
<td>9.09</td>
<td>-24%</td>
<td>3%</td>
</tr>
<tr>
<td>1</td>
<td>50</td>
<td>0.00</td>
<td>0.00</td>
<td>-25%</td>
<td>0%</td>
</tr>
</tbody>
</table>

d. Bilateral Contracting with Downstream Non-Contractible Investment

The bilateral contracting models discussed above do not account for downstream non-contractible investment. One’s instinct is that when downstream investment is important, vertical restraints that achieve the fully integrated outcome are likely to increase welfare. However, it is not obvious that vertical restraints can achieve the fully integrated outcome in a bilateral contracting environment. For example, in the secret nonlinear contracting environment, minimum RPM has no effect on the outcome unless the upstream firm can credibly commit to a price floor that it will enforce and not renegotiate bilaterally.\(^60\)

\(^60\) See O’Brien & Shaffer, supra note 58, at 306. Similarly, exclusive territories are not sufficient to achieve the fully integrated outcome unless the upstream firm can credibly commit to enforce them. These issues are
But suppose the upstream firm can commit to and enforce an industry-wide price floor in an environment with non-contractible downstream investment and bilateral negotiations over the remaining contract terms. A recent paper examines this extension of the secret contracting model and finds that bilateral negotiation still leads to wholesale prices equal to upstream marginal cost even though the retail price is fixed. The reason is that bilateral externalities are still present due to retailers’ non-price decisions, and they drive the wholesale price to marginal cost via that same mechanism as when the only downstream decision is price. When retailer’s investments create positive spillovers for their rivals, the RPM contract that achieves the fully integrated outcome requires a wholesale price less than marginal cost to give retailers a large enough margin to internalize the spillovers. However, this is not possible under secret bilateral contracting because the equilibrium wholesale price equals marginal cost. In this case, RPM can reduce welfare by raising price without providing sufficient incentive for retailers to provide enough additional services to offset the price increase.61

4. Appropriate Vertical Restraints Policy in Environments with Bilateral Contracting

The circumstances in this section in which vertical restraints raise price have a common theme: in the absence of vertical restraints that involve more than nonlinear pricing, the upstream firm cannot commit to refrain from bilateral negotiations with downstream firms that create bilateral contracting externalities in which the upstream firm effectively “competes” against itself. That is, under bilateral contracting, the pair (U1,D1) effectively “competes” against the pair (U1,D2) through its choice of its


61 Tommy Staahl Gabrielsen & Bjørn Olav Johansen, Resale Price Maintenance with Secret Contracts and Retail Service Externalities, 9 AM. ECON. J. 63 (2017). In an extension of the Levitan-Shubik demand to allow for downstream investment with spillovers, they show that RPM reduces welfare when there are positive spillovers because it raises the retail price without inducing enough retail investment benefits to offset the harm from higher prices.
wholesale price $w_1$, and the pair (U1,D2) effectively “competes” against the pair (U1,D1) through its choice of wholesale price $w_2$.

An important question is whether antitrust policy should be concerned with this type of competition. One interpretation of vertical restraints that restore the fully-integrated outcome is that they allow the upstream firm to capture the value of its brand. Investment by U1 that gives it branded market power enhances interbrand competition between U1 and U2, while vertical restraints used by U1 to achieve the fully integrated outcome among U1, D1, and D2 allow U1 to capture the value of its brand, which it must do to be willing to invest in the brand in the first place. On the other hand, if U1’s market power is due to barriers to entry unrelated to its own investment, one might argue that if bilateral contracting effectively “regulates” U1’s market power, then why not allow that benefit?

Appropriate antitrust policy toward vertical restraints in bilateral contracting settings is a big topic that raises questions at the intersection between antitrust and intellectual property policy. It is worth noting that to the extent that vertical restraints can be viewed as vertical integration through contract, the same questions could be raised about the appropriate treatment of vertical mergers in bilateral bargaining settings. The recently issued Vertical Merger Guidelines take a stand on this issue—vertical mergers that raise price in settings with bilateral bargaining (and thus bilateral contracting externalities) may be challenged by antitrust authorities. It is not immediately obvious

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62 This competition is “multilateral” in the sense that it involves not only D1 and D2, but also U1. See Daniel P. O’Brien & Greg Shaffer, Vertical Control in Markets with Multilateral Competition (Mich. Ctr. for Rsch on Econ. & Soc. Theory Paper 90-18, 1990) (working paper version of O’Brien & Shaffer, supra note 58).

63 See Dennis W. Carlton & Ken Heyer, Appropriate Antitrust Policy Towards Single-Firm Conduct 2 (Econ. Analysis Grp. Discussion Paper No. EAG 08-2, 2008), https://ssrn.com/abstract=1111665, who distinguish between “extraction,” which “is conduct engaged in by the firm to capture surplus from what the firm has itself created independent of the conduct’s effect on rivals,” and “extension,” which is “single firm conduct that increases the firm’s profit by weakening or eliminating the competitive constraints provided by products of rivals.” They argue that “conduct merely to extract surplus the firm has created independent of the conduct’s effect on rivals should be permitted.”
why vertical restraints should be treated differently, but this is a topic for further discussion.

C. Upstream Competition

I now add upstream competition to the mix. Contractual efficiency aspects of vertical contracts discussed in previous sections remain relevant: vertical restraints can mitigate or eliminate double marginalization; they can promote non-contractible investment at the upstream and/or downstream levels; and bilateral contracting externalities can put downward pressure on wholesale prices, increasing the potential for vertical restraints that soften competition to increase retail prices. Upstream competition can also increase the scope for slotting allowances, RPM, and ET to soften competition.64

Upstream competition also brings into play additional vertical restraints, including exclusive dealing and its close cousins, share-based loyalty discounts and anti-steering; and tying and bundling as to their effects on upstream competition. These restraints and issues surrounding them are worthy of another entire chapter, but I will at least touch on a restraint in this class that has received attention recently—anti-steering—and discuss its relationship with ED.65

For simplicity, suppose there are two upstream firms, U1 and U2, and a single downstream firm D1. Suppose that U1 and U2 are differentiated Bertrand competitors

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64 See Greg Shaffer, Slotting Allowances and Resale Price Maintenance: A Comparison of Facilitating Practices, 22 RAND J. ECON. 120 (1991) (slotting allowances with observable wholesale prices and RPM imposed by one manufacturer on its retailers can soften competition other retailers and raise price); Patrick Rey & Joseph Stiglitz, The Role of Exclusive Territories in Producers’ Competition, 26 RAND J. ECON. 431 (1995) (under linear tariffs, exclusive territories can exacerbate double marginalization but can also lower the effective elasticity of the derived demand for the upstream product and soften competition between suppliers; under observable two-part tariffs, exclusive territories can allow commitments to higher observable wholesale prices that soften competition). For a broader discussion of competition-softening effects that can arise when rivals observe each others contracts, see O’Brien, supra note 1, at 63, 64; James C. Cooper et al., Vertical Antitrust Policy as a Problem of Inference, 23 INT’L J. INDUS. ORG. 639, 643–45 (2005).

65 For a high-level overview of the relationship between ED, loyalty discounts, and tying and bundling, see Degraba et al., supra note 7.
with linear demand (the same example we have been using) that sell to D1, who is a multiproduct retailer that resells the products to consumers.

Absent vertical restraints, linear pricing by U1 and U2 leads to double marginalization that is worse the more upstream firms are differentiated from each other and gets smaller as the products become closer substitutes. For diversion ratios between zero and one, imperfect upstream competition holds double marginalization in check to some degree, but not perfectly.

Anti-steering in the contract between U1 and D1 is a vertical restraint that prohibits D1 from “steering” customers from U1’s product to U2’s product by charging a lower retail price for U2’s product than for U1’s product. A steering restriction is formally a weak form of exclusive dealing. Pure exclusive dealing would be equivalent to an anti-steering restriction that required charging a very high retail price for rivals’ products, high enough that customers would not buy any of it. Anti-steering that places a floor on the rival’s retail price equal to the retail price of the supplier imposing the restriction is exclusionary in the same general sense but to a much smaller degree.

A straightforward intuition explains why anti-steering used in conjunction with linear tariffs can raise wholesale and retail prices. Suppose U1 raises its wholesale price starting from a situation where U1 and U2 initially charge the same wholesale prices. Absent restrictions on steering, the retailer is likely to respond by raising U1’s retail price relative U2’s retail price, thereby “steering” customers from U1 to U2. The reason the retailer responds this way is that when U1 raises its wholesale price, the retailer’s profit from selling additional units of U1 falls relative to its profit from selling additional units of U2. But suppose U1 has an anti-steering restriction in its contract that prevents the retailer from charging a lower retail price for U2’s product than for U1’s product. In this case, the retailer cannot raise the retail price of U1’s product without also raising the price of U2’s product. This increases U1’s incentive to raise its price for two reasons. First, the retailer responds with a smaller increase in U1’s price due to the requirement that it must
also raise the price of U2 by the same amount, which it would rather not do. Second, any increase in U1’s price is accompanied by an increase in U2’s retail price, which lessens the impact on U1’s sales of the price increase. Both factors cause a smaller loss in U1’s sales from a given price increase, which gives U1 a greater incentive to raise price.

Table 7 confirms this logic in the differentiated linear demand example we have been using.66

Table 7: Effects of Anti-steering with Linear Tariffs and Efficient Nonlinear Tariffs

<table>
<thead>
<tr>
<th>Diversion Ratio</th>
<th>Wholesale Price that Induces the Fully Integrated Outcome</th>
<th>Wholesale Price under Linear Tariff</th>
<th>Wholesale Price under Anti-steering with Linear Tariff</th>
<th>Retail Price under Linear Tariff</th>
<th>Retail Price under Anti-steering with Linear Tariff</th>
<th>% Welfare Gain from Efficient Nonlinear Tariff that Achieves Fully Integrated Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>50.00</td>
<td>66.67</td>
<td>75.00</td>
<td>83.33</td>
<td>-30%</td>
</tr>
<tr>
<td>0.1</td>
<td>0</td>
<td>47.37</td>
<td>66.67</td>
<td>73.68</td>
<td>83.33</td>
<td>-33%</td>
</tr>
<tr>
<td>0.2</td>
<td>0</td>
<td>44.44</td>
<td>66.67</td>
<td>72.22</td>
<td>83.33</td>
<td>-36%</td>
</tr>
<tr>
<td>0.3</td>
<td>0</td>
<td>41.18</td>
<td>66.67</td>
<td>70.59</td>
<td>83.33</td>
<td>-39%</td>
</tr>
<tr>
<td>0.4</td>
<td>0</td>
<td>37.50</td>
<td>66.67</td>
<td>68.75</td>
<td>83.33</td>
<td>-42%</td>
</tr>
<tr>
<td>0.5</td>
<td>0</td>
<td>33.33</td>
<td>66.67</td>
<td>66.67</td>
<td>83.33</td>
<td>-45%</td>
</tr>
<tr>
<td>0.6</td>
<td>0</td>
<td>28.57</td>
<td>66.67</td>
<td>64.29</td>
<td>83.33</td>
<td>-48%</td>
</tr>
<tr>
<td>0.7</td>
<td>0</td>
<td>23.08</td>
<td>66.67</td>
<td>61.54</td>
<td>83.33</td>
<td>-51%</td>
</tr>
<tr>
<td>0.8</td>
<td>0</td>
<td>16.67</td>
<td>66.67</td>
<td>58.33</td>
<td>83.33</td>
<td>-54%</td>
</tr>
<tr>
<td>0.9</td>
<td>0</td>
<td>9.09</td>
<td>66.67</td>
<td>54.55</td>
<td>83.33</td>
<td>-57%</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0.00</td>
<td>66.67</td>
<td>50.00</td>
<td>83.33</td>
<td>-59%</td>
</tr>
</tbody>
</table>

Recall that the fully integrated retail price is $50. The wholesale price that induces the fully integrated outcome in this case is upstream marginal cost (zero in this example), as the fully integrated outcome requires that the single downstream firm face the same marginal cost as a vertically integrated firm. Under linear tariffs and without restrictions on steering, the wholesale price exceeds marginal cost, causing double marginalization.

66 The example is based on a modification of the model in Dennis W. Carlton & Ralph A. Winter, Vertical Most-Favored-Nation Restraints and Credit Card No-Surcharge Rules, 61 J.L. & ECON. 215 (2018).
and a retail price above the fully integrated price of $50 except when upstream firms are perfectly competitive (when the diversion ratio is 1).

Consistent with the intuition presented above, an anti-steering restriction by U1 in combination with a linear tariff raises both the wholesale and retail price relative to the case with a linear tariff and no steering restrictions. The price increases cause substantial welfare reductions relative to the case with no steering restrictions, as indicated in the second column from the right in Table 7.

In environments where upstream firms can sign and enforce anti-steering restrictions but are limited to linear tariffs, this analysis provides a potential justification for prohibiting steering restrictions. However, if upstream firms can employ nonlinear contracts, this justification disappears, as is evident from the last column in Table 7. In this case, nonlinear contracts with no steering restrictions eliminate double marginalization, support the fully integrated outcome, and are more profitable for the upstream firms.67 This result illustrates once again the importance of the contracts chosen by firms under the counterfactual in which specific vertical restraints are prohibited.

**CONCLUSION**

The over-arching implications of this chapter are (i) vertical restraints are often pro-competitive, a prediction that is unsurprising given that the parties’ to the vertical contracts are producers of complementary inputs into production that must be combined to produce products; and (ii) the effects vertical restraints in specific cases depend on many details of the economic environment. Details of the economic environment discussed in this chapter include:

- How contracts are likely to adapt when particular restraints are prohibited;

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67 Carlton & Winter, *supra* note 66, examine more general models of anti-steering (which they term vertical MFNs, or “VMFNs”) that involve downstream competition.
• Whether firms make non-contractible decisions (e.g., upstream and downstream investment decisions) that affect the demand for the product;
• Whether contract terms involve a single product or multiple products;
• Whether contract terms are offered on a take-it or leave-it basis with no bilateral renegotiation or are bilaterally negotiated;
• The information downstream firms have about their rivals’ contracts;
• The upstream and downstream market structure.

All of these factors can be important, at least within the confines of the existing economic literature, and this list omits key factors. For example, this chapter does not discuss economies of scale and network effects, two factors that are critical in dynamic theories of exclusive dealing and tying, nor does it discuss variable proportions between different inputs into production, which affects the analysis of tying.

Antitrust practitioners long for simplification. Unfortunately, economic theory has not cooperated in the area of vertical restraints. It would be nice if the analysis of vertical restraints were simple, but it is not. The complexities are undoubtedly part of the explanation for why there are currently no federal vertical restraints guidelines in the U.S.

A silver lining is that modern industrial organization has provided many tools for navigating the complexities. But a tarnish on the silver is that the very same tools are good at identifying ways that vertical restraints could harm competition without saying anything about the costs of determining whether real harm exists and the type I and II error costs associated with intervention. Given this fact about the state of economic theory in the area of vertical restraints, two fair questions are: (1) what market forces exist to limit plaintiffs’ incentives to pursue cases against vertical restraints that do not pass the social benefit-cost test? and (2) are these forces strong enough? Two answers to the first question seem to be: (a) limited resources at the antitrust agencies and the courts, and (b)
rule-of-reason treatment of vertical restraints by the law that places the burden of proof on plaintiffs and thereby limits their probability for success. Both factors increase the costs of pursuing antitrust claims against vertical restraints. The answer to the second question—whether the forces pushing against plaintiff activity are strong enough—is open to debate. However, given the limited empirical evidence documenting harm from vertical restraints, it would be hard to argue for reducing the costs to plaintiffs of pursuing antitrust complaints against vertical restraints.

68 See Cooper et al., supra note 64, at 658; Francine Lafontaine & Margaret Slade, Vertical Integration and Firm Boundaries: The Evidence, 45 J. ECON. LITERATURE 629, 629 (2007).
Vertical Restraints in a Digital World

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Abstract

The subject of vertical restraints is well-trodden territory in antitrust. Most of the cases, and economic literature, have focused, however, on the physical world of manufacturers and distributors. This paper considers what’s new and different about the digital world that matters for the antitrust analysis of vertical restraints. Cases and economic learning from the physical world remain highly relevant. What makes the digital world different is the prominence of intermediaries, most of which are multisided platforms, and the implications of the Internet and other information technologies for these intermediaries and the businesses that rely on them. After describing key features—including critical mass, multi-homing, and platform governance regimes—this paper considers important aspects of analyzing vertical restraints in the digital world. It then considers several applications involving platform rules, exclusive contracts, and MFNs for digital intermediaries.

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I. Introduction

Most cases and economic analyses involving vertical restraints have focused on the physical world of manufacturers and distributors. Commerce, however, is moving rapidly to a digital world populated by firms whose provision of goods and services depends heavily on Internet connections. For the analysis of vertical restraints, this digital world could involve the same principles just different facts. To a large extent that’s the case. Certain features of digital businesses, however, are distinct from the physical world and will play a substantial role in matters before competition authorities and courts.

This paper provides a guide to those features and their implications for the analysis of vertical restraints. Section I describes what’s new and different about digital businesses that may matter for antitrust analysis of vertical restraints. Section II provides some general principles for analyzing vertical restraints in the digital world. Section III considers vertical restraints arising from the application of platform rules for participation, exclusive contracts, and MFNs to help illustrate these principles. Section IV concludes briefly.

II. What’s New and Different About the Digital World

The digital economy, as defined here, comprises businesses that rely substantially on the Internet to provide products and services to consumers. The products could be digital, and delivered digitally, such as video (YouTube) or search results (Google). They could be physical products that are delivered physically but are found and bought digitally (Amazon). They could be services that are delivered and consumed physically, such as a ride, but facilitated mainly over the Internet (Uber). They also comprise digital products and services that enable other digital businesses, such as mobile app platforms (Apple). By this definition, the digital economy
excludes important digital products that are not provided primarily over the Internet such as payment card networks (Visa). This paper also does not consider businesses that provide the critical physical infrastructure for the digital economy, such as fixed and mobile broadband providers.

The digital economy is substantial and is likely to become an even larger portion of the overall economy. In the U.S., online firms account of almost half of the time people spend on media, 39 percent of total advertising spending, and about 10 percent of total retail commerce.\(^2\) Expectations of future growth are partly responsible for driving up the valuations of digital businesses. As of October 1, 2019, seven of the ten most highly valued publicly traded companies made most of their profits from products and services that depend heavily on the Internet.\(^3\) The growth of online commerce is likely to accelerate with the deployment of 5G technologies that will blanket the physical world with connected devices that can handle vast amounts of data at much greater speeds than today.

Many economically significant digital businesses operate intermediaries. In most cases these intermediaries are multisided platforms that facilitate beneficial interactions, often exchange, between distinct types of participants for which there are usually indirect network effects with other participants. In some cases, these intermediaries follow a traditional reseller model in which buyers interact directly with the intermediary rather than with sellers.\(^4\) The main

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\(^3\) Market capitalization data sourced from S&P Capital IQ. The top 10 firms include Microsoft, Apple, Amazon, Alphabet, Berkshire Hathaway, Facebook, Alibaba, Tencent, Visa, and JPMorgan Chase.

\(^4\) See Matchmakers at Ch. 7, and Hagiu, Andrei and Julian Wright (2015) “Marketplace or Reseller,” Management Science 61(1), pp. 184-203, for a discussion of the difference between platforms and resellers. Roughly speaking a shopping mall is platform while a department store is a reseller. This paper refers to “digital multisided platforms” simply as “digital platforms” and digital intermediaries that follow a reseller model as “digital resellers.”

Electronic copy available at: https://ssrn.com/abstract=3551597
novelties in the analysis of vertical restraints in the digital world involve these digital intermediaries.

**A. Significant Digital Businesses Are Usually Multisided Platforms Based on Software**

The largest digital businesses earned a substantial part of their revenues from operating multisided platforms. Table 1 lists the seven largest global digital businesses and the intermediaries that drive a large part of their revenues. Many other economically significant digital businesses, such as the various ride-sharing services, operate multisided platforms. And it remains a common model for venture-backed startups.

Digital platforms rely primarily on software to provide core services such as matching, search, discovery, transactions, and communication. They also depend on the Internet to connect participants and to provide those core software-based services. The software for digital platforms typically resides on server farms maintained by “cloud providers” or in proprietary server farms.

Indirect network effects often fuel the growth of multisided platforms. More participants on one side of the platform makes the platform more valuable to participants on the other side of the platform. Rapid growth can occur as more participants join each side and thereby increase the attractiveness of the platform leading to more participants to join.

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5 Amazon also operates a digital platform (Amazon Marketplace) and a digital reseller (Amazon) side-by-side. Buyers see offers from both on its website and app and some sellers participate in both models. Each business model accounts for about half of its ecommerce revenue.
Table 1: Large Digital Businesses and Their Platforms

<table>
<thead>
<tr>
<th>Company</th>
<th>Platforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft</td>
<td>Windows, Bing, Azure,</td>
</tr>
<tr>
<td>Apple</td>
<td>iOS including App Development Platform and App Store</td>
</tr>
<tr>
<td>Amazon.com</td>
<td>Amazon Marketplace, AWS</td>
</tr>
<tr>
<td>Alphabet</td>
<td>Android (including Google Play), Google, YouTube</td>
</tr>
<tr>
<td>Facebook</td>
<td>Facebook, Messenger, Instagram, WhatsApp</td>
</tr>
<tr>
<td>Alibaba</td>
<td>Taobao, Tmall, AliExpress</td>
</tr>
<tr>
<td>Tencent</td>
<td>QQ, WeChat, Tencent Games</td>
</tr>
</tbody>
</table>

The Internet as well as other information technologies reduce physical constraints on expanding users and can thereby accelerate these indirect network effects. As a result, digital platforms can prove a concept locally, and then expand to many locations, using similar software and processes. They can do that more quickly than physical businesses that require more local facilities to provide services through broader physical spaces. Digital platforms and resellers now cover most sectors of the economy.

The following discussion focuses on features of digital platforms that are particularly relevant for analyzing antitrust issues involving vertical restraints. These features are the same for digital platforms as they are for physical platforms but are magnified as a result of Internet connectivity, software, and related information technologies. Although the details differ, digital resellers have similar features even though they do not facilitate direct interactions between the various groups of participants.
B. Platforms Need to Reach Critical Mass to Ignite and Grow Profitably

Digital platforms face the same chicken-and-egg problem that physical platforms often face. If they don’t offer access to enough of the right participants, they don’t have much to offer. This situation is different than traditional businesses which sell products rather than access. To get off the ground, a sliced-bread manufacturer needs a factory and ingredients to make bread. To get off the ground, a heterosexual dating platform must have enough men and women to offer an interesting dating product to either group.

Critical mass refers to the minimum set of members of both sides necessary for the platform to provide a sufficiently valuable service that it can keep those members on board, grow by attracting more users than it loses, and become a profitable enterprise. Economists recognized the importance of critical mass for businesses that had indirect network effects in the 1990s. What that literature missed was the pervasiveness of intermediaries that rely on indirect network effects and how common the critical mass obstacle is in the physical world. The critical mass problem is the same for digital platforms as for traditional ones, although the particulars of solving the challenge may differ.

How the critical mass problem gets solved in practice is a bit outside of the traditional toolkit for economists, as it is fundamentally a disequilibrium phenomenon whose details are highly dependent on the circumstances of the platform. Early adopters and expectation management are often key. Platforms need to get early adopters on board and then get enough momentum to keep them there. Participants will invest in using the platform if they expect that it

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6 See Matchmakers at Ch. 5.
will eventually reach critical mass and become valuable to them. Platforms can adopt a variety of strategies to entice more participants on board and shape expectations.8

Platforms may try to get “anchor tenants”—a term taken from shopping malls—to create a mass of demand from one type of participants. They can also try to use subsidies to get one or both types of participants on board subject to liquidity constraints. Contingent contracts provide another potential way to crack the chicken-and-egg problem. Participants on each side enter into contracts to join and use the platform that are triggered by other specified participants on the opposite or same side joining. For platforms in which participants on one side provide specific products or services to the other side, the platform can offer those products or services itself—that is, it can vertically integrate into one side of the platform.

Platforms that cannot achieve critical mass relatively quickly often fail. Initially, the platform gets early adopters, and others who stay with it, in expectation that it will become valuable. Some of them may drop off as they become disappointed. For the platform to reach critical mass it needs to attract more participants, on both sides, than it loses. If that doesn’t happen quickly enough, the platform will start losing more participants than it gains and eventually fail. Failure is a common result in practice. The fragility of startups can provide an opportunity for established players to maintain their positions as discussed below.

Critical mass isn’t just important for startups. Platforms need to maintain critical mass to remain viable. Indirect network effects can work in reverse. If participants on one side leave the platform it becomes less valuable to participants on the other side. This can lead to a death spiral

as more participants desert it and it falls below critical mass. Platforms may adopt business practice to reduce the risk of that happening.

C. Consumer Ability to Use Multiple Platforms and Switch Between Them Key

Sometimes it is easy for participants to use several similar platforms. They could switch between them depending upon which has more relevant participants for an interaction, has better prices, or for other competitive reasons. That is known as “multihoming.” People have several ad-supported media apps on their smartphones and easily switch between them. Advertisers may be able to reach the same people through different media apps.

In other cases, fixed costs, learning costs, and other costs make using several platforms inefficient so that participants standardize on one. That is known as “single-homing.” Most people use a single operating system for their personal computers even though in principle they could have several running on the same machine or have desktop and laptops with different operating systems. App developers can reach those users only by writing to that operating system.

When participants on one side single-home, the platform is the only way to get access to those participants at that time. The platform is a bottleneck and an economically material one if it has captured many of those participants. Participants may still be able to switch to another platform, such as from Windows to the macOS, even if they need to single-home. Thus, the competitive importance of single-homing depends on the number of participants covered and their ability to switch.
In the digital economy, platforms often sit on top of other platforms. Foundational platforms are most susceptible to single-homing because they are often based on operating systems and hardware platforms that involve material switching costs. The iPhone, which relies on the iOS operating system and the App Store, provides a foundational platform for apps such as Uber. Users may be able to multi-home on app-based platforms—for example, iPhone users could have Uber and Lyft on their phones; app developers can also develop apps for both iOS and Android.

When users can easily switch between apps or websites it is possible that “competition is only a click away.” Of course, the ability to click on an alternative is only one aspect of the ability to multi-home which would therefore require deeper consideration in an actual case.

D. Ease of Entry Influenced by Critical Mass and Multihoming

The opportunities and obstacles for entry are influenced by critical mass and multihoming considerations in the same way they are for physical platforms. For our analysis of vertical restraints in the digital economy, however, these considerations are worth calling out because of the importance of platform intermediaries and the role of technologies in fostering indirect network effects and the possibility of multihoming.

To secure critical mass, to ignite and grow, an entrant may be able to tap into a large pool of unaffiliated participants when the market is nascent. The entrant, like the incumbent, still has the challenge of convincing many prospects that the platform service has value. As the market matures, and more prospects have selected platforms, the entrant may have to persuade participants on incumbent platforms to consider its platform to build to critical mass.

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9 See Matchmakers, Chapter 3.
Entry is easier when multi-homing is possible on both sides. The entrant may be able to get participants on other platforms to try the entrant’s platform. Meanwhile, the entrant can perfect its platform and try to build critical mass. Participants on incumbent platforms may be willing to do this because they don’t incur any significant switching costs. Even if there are some costs of switching over, they can gain some information on whether the move is worth it.

Entry is harder when there is single-homing on one or both sides. The entrant must convince participants on incumbent platforms to switch, which is hard before it has built critical mass and, even if it has built critical mass, may be hard given the indirect network effect scale advantages possessed by incumbents. The entrant could also tap into participants who haven’t committed, which is particularly important in nascent markets where most potential participants haven’t joined any platform, or ones who have exited failed platforms.

Vertical restraints, as I discuss below, could be used to convert a market that is naturally prone to multi-homing into single-homing, thereby, making it more difficult for entrants to secure critical mass and for smaller incumbent rivals to maintain it.

E. Platforms Have to Deter Participants from Behaving Badly

Platforms operate communities, in which participants interact with each other and, as in any community, participants may behave badly towards others.\(^\text{10}\) Participants can engage in deception, fraud, bullying, hate speech, post porn or other offensive material, breach contracts, and so on. By doing so, these participants impose negative externalities on participants, on the same or other sides, and thereby reduce the value of the platform to its members. These offenses

can limit the amount of activity on the platform, the interest of participants to join it, and the amount participants are willing to pay to participate. Platforms have profit incentives to deter these offenses.

Platforms do so by operating governance systems like those run by governments for communities. They have platform rules that prohibit or require certain behavior. They have detection methods, involving software and staff, to ferret out violations of these rules. They impose penalties for breaking the rules as well as screening methods for keeping bad actors off the platform. These governance systems are a distinct feature of platforms. Traditional businesses seldom have such elaborate systems. Platforms need them because of the externalities that can arise from the constant interaction of participants.

Governance systems are particularly common and sophisticated for digital platforms.\(^\text{11}\) eHarmony, a dating site, prohibits 17 activities including sending annoying communications or providing misleading information. Amazon’s marketplace has a seller code of conduct that includes prohibitions against a variety of behaviors such as against trying to damage other sellers or improperly influencing consumer ratings. Google’s search engine prohibits websites from many efforts to influence ranking unfairly or essentially gaming its algorithms.

Platforms, including digital ones, have more limited options for penalizing bad behavior by their communities than governments do. They typically enforce rules by excluding participants from the platform. The bans could be permanent or temporary. Google, for example, punishes websites that improperly game the system by forcing them far down the search rankings for some period. Amazon permanently bars sellers who engage in fraudulent behavior. The ban

\(^{11}\) U.S. Congress encouraged platforms to have these systems when it passed Section 230 of the Communications Decency Act. Section 230 essentially immunized platforms from barring participants, or their content, so long as they were doing so as a good-faith application of their rules. For further discussion see Evans, David (2019) “Deterring Bad Behavior on Digital Platforms,” available at SSRN: https://ssrn.com/abstract=3455384
could be full or partial. Digital platforms may decide to ban some content, or apps, from a participant, but not all. Facebook may delete some content that a participant has posted but allow the person to continue to use the social network.

These governance systems are controversial now because of allegations that platforms have been too lax, thereby permitting too much bad behavior, or too restrictive, thereby preventing free speech. Most of these complaints lie outside of antitrust. The core antitrust issue concerns situations in which the platform also operates a business on one side of its platform and in which the platform has allegedly used its governance system to raise rivals’ costs or exclude competitors on that side.

F. Platforms Use Algorithms to Determine What Users See

To facilitate interactions between participants, platforms provide search and discovery tools for finding possible partners, as well as targeting methods to present themselves to possible partners. The platform may also show connections on its own based on its predictions of participants’ value from being exposed to those possible trading partners. Digital platforms, more so than others, make heavy use of software-based technologies to perform these functions. These technologies involve algorithms that use data, and statistical methods for learning from that data, to make predictive decisions. Digital platforms also rely on many other techniques. They provide reviews for users and products, tools for participants to display information, and targeted advertising.

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Google, for example, uses algorithms to decide which, if any, ads to present on a search-results page following a query. The algorithms predict the likelihood that a consumer who makes that query will find the ad relevant, and useful, and click on the ad. By showing more relevant ads, Google increases the likelihood it will make money from the search engine results page it presents; making the ads more relevant to consumers increases the likelihood they will do more searches.

G. Digital Platforms Are Different from Physical Ones Mainly Because of the Technology

Digital platforms are like physical ones. Getting critical mass is a pervasive problem for platforms. The extent of single-homing is an issue for all. Platform governance systems are common. And they all help participants engage in search and discovery and many try to predict what participants want.

The combination of the Internet, software, data, and information technologies, however, dramatically lowers the cost of starting and scaling a platform, expands the capabilities for matching participants and facilitating exchanges, and increases the ability to collect and deploy data. The combination also makes many new features possible, such as posting feedback.

Of course, digital platforms themselves are highly diverse. Analyzing antitrust, as always, requires a fact-intensive analysis concerning the circumstances surrounding the complaint and the businesses implicated by it.

III. Economic Analysis of Vertical Restraints for Digital Platforms

There is a vast economic literature on vertical restraints as well as a long history of cases. Most of this work was developed for the physical world. There are many situations in which the
literature and precedent applies directly to the digital world. There is no obvious difference between a manufacturer entering into resale price maintenance agreement with digital intermediaries versus physical distributors. Some details may differ, but they always do between matters.

There are, however, situations in which differences involving digital technologies are important. Physical retailers, for example, use data to make decisions on where to place their own and other’s products. But the sophistication and power of the algorithms and the ability to vary product placements in virtually real time, over Internet connections, can make digital retail much different from physical retail.

The big difference between the digital and physical world, however, concerns the role of intermediaries and multisided platforms. Given the opportunity to develop large digital distribution platforms, cases involving manufacturers imposing vertical restraints on distributors are likely to be less important than cases involving distributors imposing vertical restraints on participants.

The economic literature on vertical restraints for single-sided firms has insights for multisided ones but one cannot assume that the models and results necessarily apply without modification. That is true for the physical platforms too. The issue becomes more important in the digital world where there are more platforms, and these platforms are powered by Internet and related technologies, and likely more cases in which this issue comes up.

This section runs through some of the key considerations regarding vertical restraints involving digital platforms. Similar factors apply to digital resellers, at least to some degree. These are early days and as we get more experience with cases this list will surely grow longer and more nuanced.
A. Claims Could Involve Horizontal or Vertical Foreclosure

Digital platforms compete horizontally with other platforms to get both types of participants to join and use them. Apple’s iPhone platform and Google’s Android platform compete for users, beginning with buying a smartphone, and developers writing apps. A dominant platform could face claims that it has imposed vertical restraints that limit competition between the platforms. In the smartphone case, a claimant might argue that practices that limit interoperability and portability for users and developers are anticompetitive vertical restraints.

Digital platform owners may also compete with some of their participants. Google, for example, offers services on its search engine results page, such as Google Shopping, that compete with services provided by other comparison-shopping platforms which participate in Google’s indexing and ranking service. The European Commission claimed that Google engaged in various practices that disadvantaged some of those websites.

There is another dimension of competition for some ecommerce properties. The property may operate an online marketplace, which is a two-sided platform for buyers and sellers, as well as an online store, which operates under a traditional reseller model. Both, of course, rely on Internet technologies, algorithms, and other innovations involving the digital economy. In addition, ecommerce properties may offer private-label products in competition with sellers on its online store and marketplace. Amazon and Walmart, which operate the first and third largest ecommerce platforms in the US, both do so.¹⁴

B. Antitrust Claims Face Usual Issues of Incentive and Ability to Foreclose Competition

Vertical restraints for digital businesses pose the same basic analytical question as for physical ones. Does the business have the ability and the incentive to engage in the practice to foreclose competition? Addressing this question for digital platforms raises the same issues as for physical platforms. The analysis, however, must account for the relevant facts some of which may be particular to the digital world. Market definition, which is not the subject of this paper, should help inform whether the digital business has the ability and incentive to foreclose competition through a vertical practice.\(^\text{15}\)

Whether the digital platform can foreclose competition through vertical restraints will typically depend on whether it can limit access to a substantial group of participants on one or both sides of the platform. It usually wouldn’t be able to do so if the platform is small relative to the overall market served or if the market is nascent, and most potential participants on both sides haven’t joined, so there is plenty of opportunity for entry.\(^\text{16}\) A ride-sharing platform may have a small fraction of the drivers and riders who have joined platforms, or it may be operating during a stage of development where there is large untapped pool of both drivers and riders.

The ability of a platform to limit access would depend on the extent to which participants multihome and, if they single home, how easily they could switch to another platform. This list

\(^{15}\) The two-sided platform literature shows that profits, and thus to ability to increase those profits through higher prices, are determined at the platform level as a result of the interdependencies between the two sides and the need to balance their prices. Depending on the jurisdiction and type of platform under consideration the courts may prefer to define markets at the platform or side level. In the U.S. the Supreme Court ruled that the market should be considered at the platform level when indirect network effects are more than minor (the American Express credit card network) for a matter involving vertical restraints (rules that prohibited merchants that accepted the American Express card from then steering consumers who tried to use the card to competing card networks). Ohio v. American Express Co., 138 S.Ct. 2274 (2018).

\(^{16}\) Digital platforms serve diverse sets of customers. Depending on the matter the relevant antitrust market, and the focus of the analysis, could be a segment of the platform rather than its entirety. To simplify the discussion this paper refers to the platform generally.
isn’t exhaustive. There may be other factors, including technological ones, that influence whether the platform can prevent access. A ride-sharing platform, for example, could impose an exclusivity provision on drivers but it might be difficult to monitor and enforce compliance.

Whether the digital platform has the incentive to foreclose requires weighing the benefits of foreclosure, including the likelihood of succeeding and securing profits that it wouldn’t in the absence of the vertical practice, against the costs, including forgone earnings from participants subsequent to the restraint. The analysis of these issues requires the consideration of the two-sided features of the platform including feedback between the two sides. If a vertical practice results in the loss of some participants on one side, for example, that may reduce the value to the other side, and thereby may increase the costs of engaging in the practice. As with ability, assessing whether there are incentives generally entails fact intensive inquiry, and the details will vary across platforms and practices.

Several features of a digital platform could enhance its ability and incentive to foreclose competition and therefore warrant close examination in cases. A digital platform may capture a substantial portion of potential participants as a result of indirect network effects facilitated by the Internet and related technologies. The platform does not have to be the first mover—just an early mover that got to critical mass early and grew at an accelerating clip after that. The digital platform has at least some control over access to participants on both sides. It therefore has a set of relationships that it could use to foreclose competition for existing or new platforms.

Anticompetitive strategies wouldn’t be necessary if indirect network effects made it hopeless for smaller platforms to challenge dominant incumbents. Like all businesses, however, platforms can compete in the face of scale advantages by differentiating themselves. They can try to appeal to particular types of users, on either side, by catering to their different tastes.
horizontal differentiation) or focus on particular degrees of quality and price (vertical differentiation). By specializing in these ways, platforms can create value that mitigates their smaller scale. In addition, when consumers can multi-home, or readily switch between digital platforms, the indirect network effects for the leading platform are not necessarily durable. Rivals could pick off participants from the leading platform. Just as indirect network effects accelerated growth for the leading platform, they can also accelerate decline.

As a result, the leading platform cannot just count on its size to keep the market to itself. It therefore may have incentives to foreclose platform rivals despite the advantages it has secured from indirect network effects. The need for rivals to achieve critical mass to attain sustainable growth may provide the leading platform the ability to act on these incentives and foreclose actual or prospective rivals. It can look for strategies that prevent these rivals from securing enough participants on one or both sides. That could include protecting itself from vulnerability arising from the ability of participants to multihome across and switch between platforms. It could use the standard set of vertical restraints to do so.

Digital platforms could enlist their algorithms for exposing participants on one side of the platform to those on the other. A platform, for example, could condition the extent of exposure of participants on one side to trading partners on the other side based on their degree of loyalty to the platform. It could do this as part of negotiations to get participants to enter into agreements that contain vertical restraints. To obscure its strategy, it could also reduce exposure for participants that refuse to enter vertical restraints rather than refusing them to join the platform. A digital platform that offered a service on its platform that competed with a particular participant could use algorithms to reduce the exposure of that participant to the other side of
Doing so could obscure its exclusionary strategy and make it harder to establish than simply refusing to allow the rival participant on the platform.

Digital platforms could enlist their governance systems in vertical restraint strategies. Consider the situation in which the platform also competes with a participant. It could use its governance system to exclude that participant or impose costs on that participant that it doesn’t incur. These efforts may be less transparent than a direct denial of access. A platform could also enforce its governance system more strictly for participants who do not agree to vertical restraints that are designed to foreclose competition by rival platforms.

C. Vertical Practices by Digital Platform May Increase the Value of the Platform for Participants and Therefore be Pro-Competitive

The mere prospect that a digital platform could use vertical restraints to harm competition does not mean that it is necessarily doing so. As with vertical restraints generally, the platforms may have imposed the vertical restraints to enhance efficiency such as dealing with principal-agent or free-riding issues. The vertical restraint may foreclose competition in the sense that whenever a business offers a better product, or does so more efficiently, it secures an advantage over its rival. The challenge, as with all vertical restraint cases, involves distinguishing the pro-competitive use of vertical restraints from anti-competitive ones.

Digital platforms have profit incentives, for example, to design their algorithms to increase the value that participants on each side can secure from interactions with participants on the other side. That typically means either exposing a participant to the most suitable possible

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matches or providing information that enables the participant to assess their likely value. In doing so the algorithms necessarily downgrade participants who are likely to be less desirable. That can result in some participants not being presented, in effect, to other participants. Most people do not, for example, look beyond the first search engine results page and are much more likely to engage with organic search results and paid ads that are higher on the first page.

To take another example, as we saw above, digital platforms have profit incentives to deploy governance systems to weed out bad behavior that can degrade the platform. By doing so they make the platform more desirable for participants. And a more desirable platform is likely to generate more indirect network effects which increases the value to all participants. Some participants may complain about the rules, because they interfere with their business models, and especially if they are expelled from the platform.

Of course, as with anticompetitive effects, assessing whether practices result in pro-competitive efficiencies, generally requires a fact-intensive analysis tailored to the circumstances of the matter. And any pro-competitive benefits need to be weighed against anti-competitive costs when the businesses engaging in the conduct has significant market power.

**D. Digital Platforms Require Two-Sided Analysis to Assess Whether Vertical Restraints Result Harm Competition**

The economic literature on two-sided platforms shows that the analysis of anticompetitive practices should account for a variety of issues that arise from platforms serving
interdependent groups of users. Digital platforms raise the same issues as physical platforms including the assessment of market definition, market power, and anticompetitive effects.\textsuperscript{18}

An important insight of the two-sided literature is that practices that cause harm on one side could benefit the other side so that it doesn’t cause an overall decrease in welfare. That is consistent with the platform adopting the practice to increase the value of the platform rather than to foreclose competition. It is also possible that the anticompetitive effects of a practice come from the interdependence between the two sides which might not be detected from looking at each side in isolation. A platform, for example, might be able to impose exclusive contracts that fall below common thresholds used by the courts to assess anticompetitive foreclosure but by imposing these on both sides it makes it hard for an entrant to secure critical mass.

\textbf{IV. Exclusive Contracts, Governance Systems, and MFNs}

This section considers three types of matters involving vertical restraints and illustrates them with public information concerning recent cases. Part A considers the use of exclusive contracts by a dominant platform to harm competition with a rival platform. It emphasizes two aspects that are particular to digital platforms: the use of exclusives to prevent rivals from securing or maintaining critical mass or the benefit of indirect network effects; and the role of algorithms in securing loyalty (single-homing) by some participants. Alibaba’s use of exclusive contracts for sellers on its Tmall property in China provides an example.

\textsuperscript{18} Recently, high courts have considered the application of the two-sided analysis to cases. High-court decisions in the United States (American Express), the European Union (Cartes Bancaires) and China (Tencent) have emphasized the importance of accounting for the interdependencies between the two sides, at least in the matters before them. Ohio v. American Express Co., 138 S.Ct. 2274 (2018); Groupement des Cartes Bancaires (CB) v Commission, C-67/13 P, EU:C:2014:2204; Qihoo 360 v. Tencent, Supreme People’s Court of People’s Republic of China, Civil Judgment No. Minsanzhongzi 4/2013, October 2014. For a detailed discussion of American Express see Evans, David and Richard Schmalensee, \textit{Antitrust Analysis of Platform Markets: Why the Supreme Court Got It Right in American Express} (Boston: CPI, 2019).
Part B examines the use of governance systems by a dominant platform. It considers the sham use of rules to raise rivals’ costs, or exclude, a participant on the side that competes with the platform’s own service on that side. Apple’s alleged use of its app developer rules to impose limitations on Spotify, which competes with Apple Music, provides an example.

Part C considers the use of MFNs by digital platforms. It focuses on a common situation for digital platforms in which they charge sellers a commission and may have MFNs that apply separately to price and commission. The UK’s Competition and Markets Authority investigation of the use of price MFNs by price comparison platforms for insurance provides an example.

Throughout this section we assume that the digital platform engaging in the practice has substantial market power in a relevant antitrust market. In practice, of course, that analysis would need to assess the relevant antitrust market, accounting for two-sided considerations, and determine whether the platform has substantial market power (or is dominant) in that market.

A. Exclusive Contracts and the “Cat-and-Dog War” in China

The dominant platform could require some participants on one side, or possibly both, to enter into exclusive contracts for some period. These contracts would deter these participants from multi-homing during that period. That matters in practice mainly in the case in which participants would not find it in their self-interest to single home in the absence of the restraint. The contracts could also deter these participants from switching to a rival platform during that period. The contracts could target all participants on both sides, all participants on one side, or they might target large participants—anchor tenants—on one side. The exclusives could also affect a category of participants, or the platforms that service those participants, that might constitute a relevant antitrust market.
The dominant platform could insist that participants enter into these contracts to operate on the platform. It could provide rewards or penalties for divided loyalties to achieve the same results as an exclusive. The dominant platform could use its algorithms to impose penalties on participants that do not agree to formal exclusives. It could reduce the extent to which non-loyal participants on one side are exposed to participants on the other side or provide loyal participants greater levels of exposure and marketing assistance.

Key considerations for evaluating whether these exclusivity provisions could harm competition include, as is usual, the explicit or de facto coverage of the provisions in the relevant antitrust market, the duration of the provisions, and therefore how much of the market is contestable for rivals. This analysis, however, needs to be conducted considering the two-sided features of these platforms. In particular, the analysis should consider the extent to which the exclusivity provisions could prevent: entrants from securing critical mass; smaller incumbents from losing critical mass so that they are no longer viable; and smaller incumbents from capturing indirect network effects that could drive future growth.\(^\text{19}\) A further issue is the extent to which participants, forced to single-home, can switch platforms.

Exclusivity agreements could also enhance efficiency. That could be the case for traditional reasons such as preventing free riding on platform efforts, preventing the loss of valuable competitive information to a rival, and aligning platform and participant incentives for mutual gain to name a few. Digital platforms could also raise specific issues that could provide pro-competitive explanations for the practices. The exclusives may help secure and maintain critical mass and thereby provide value to platform participants. Getting key participants on one side to agree to an exclusive could help persuade participants on the other side to join. There

\(^{19}\) A practice that might seem innocuous in a single-sided context could be problematic in a two-sided one because of the role of critical mass in securing ignition.
could be other reasons why preferential treatment of some participants, in return for loyalty, could increase indirect network effects or reduce negative externalities on the platform. Whether any of these efficiency explanations applies, and the magnitude of the benefits if any, would need to be evaluated.

The Great “Cat-and-Dog War” in China illustrates the potential anticompetitive use of exclusive contracts. Alibaba operates Tmall, whose logo is a cat. Tmall is a B2C marketplace of buyers and sellers for consumer products. It competes with JD.com, whose logo is a dog. JD operates both a reseller model and a marketplace model that enable sellers to distribute products to consumers. Tmall is the leading B2C ecommerce platform in China and twice as large as JD.com: as of 2017 Tmall had a 57 percent share of online retail commerce and JD.com a 28 percent share. Several smaller ecommerce sites accounted for the remainder. Tmall had about an 80 percent share of apparel sales in China compared to about 8 percent for JD.com in the first half of 2017.

Tmall adopted a policy known as “Choose One of Two”. It asks sellers to make a choice between Tmall or other platforms. Tmall acknowledges that it has secured a growing number of exclusives but defends its policy: “Like many e-commerce platforms, we have exclusive partnerships…. The merchant decides to choose such an arrangement because of the attractive services and value Tmall brings to them.” It didn’t explain the nexus between the exclusive partnerships and the attractive services or whether additional services were provided in exchanged for the exclusives.

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Tmall apparently does not make signing an exclusive contract a condition of operating on its platform. Instead, according to numerous merchant interviews reported in the press, and lawsuits filed against the company, Tmall retaliates against sellers that refuse to enter exclusive deals in ways that reduce their visibility and sales. Five large American consumer brands claim that they experienced a sharp drop in traffic to their storefronts on Tmall. According to one article, “Executives said that after they rebuffed Alibaba, their brand’s banners vanished from prominent spots in Tmall sales showrooms and products stopped appearing in top search results.”

In June 2017, many apparel merchants complained that Tmall requested them to withdraw from other e-commerce platforms including JD, VIP.com and Dangdang. Some claimed they would lose 30 percent of their sales if they complied. If they refused, however, they would jeopardize the much larger volume of sales on Tmall. Semir, a famous apparel brand in China, shut down its flagship store on JD in September 2017 despite having realized substantial growth on this competing platform. JD.com claimed that as of early 2018 that more than 100 Chinese brands had defected in 2017.

Galanz, which sells home appliances, asserted that during the “6.18” promotional festival in 2019 Tmall attacked six of its core stores through the manipulation of algorithmic results, in retaliation for refusing Tmall’s request that Galanz withdraw from the competing Pinduoduo platform. According to Galanz, Tmall excluded its stores from search results and did not display

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rankings that buyers relied on. As a result, Galanz claims its store sales declined by between 40 to 90 percent compared to the previous year.

Tmall’s efforts to secure exclusives have attracted antitrust lawsuits by competing ecommerce intermediaries. JD, joined by Pinduoduo and VIPshop, have sued Tmall for abuse of dominance in Beijing High People’s Court. Galanz, as a platform participant, has also sued Tmall for abuse of dominance in Guangzhou Intellectual Property Court. These cases are interesting because they involve one of the largest ecommerce properties in the world, Alibaba, and concern the use of algorithmic methods to, according to the complaints, secure explicit or de facto exclusives.

While there may be pro-competitive explanations for exclusive contracts, they pose some risks for competition when they are used by dominant digital platforms. Consider the situation in which the dominant platform accounts for the preponderance of buyers in a relevant antitrust market. Sellers could lose access to most customers if they refused to agree to an exclusive. As more sellers enter exclusives, buyers will tend to see the dominant platform even more. As the smaller platform loses sellers it will lose buyers which will make it even less attractive to seller. That could further entrench the dominant platform. The smaller platform may remain viable but limited in its ability to grow and compete. Platforms that haven’t reached a critical mass, and are not yet viable, may not be able to do so and, considering that, entrepreneurs and investors may

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decide not to enter.\textsuperscript{29} Of course, whether the exclusives are extensive enough to cause these effects is an empirical matter.

A successful anticompetitive strategy can harm both buyers and sellers. To begin with, both lose the opportunity to multi-home on several platforms—options they would presumably have in the absence of exclusive contracts. Multi-homing intensifies competition along non-price dimensions such as service and discovery mechanisms. The exclusivity agreements can also raise prices. By limiting competition, the dominant platform can increase the commissions it charges sellers for distribution on its platform. Those sellers may pass some, or possibly all, of those increased commissions back to consumers in the form of higher prices. Depending on the jurisdiction the competition authorities and courts may require evidence that these effects have occurred, or just that there is material risk they would occur.

**B. Governance Systems and the Music Wars**

The previous example concerned the possible use of exclusive contracts to harm competition by a rival platform. A governance system provides a way for a platform that provides a service on one side of the platform to harm rivals that depend on its platform to provide their services to the other side of the platform. Participants may expend resources complying with these rules. The platform could make those costs higher for a rival—that is, engage in a raising rival’s cost strategy—by applying the rules more strictly with rivals or demanding costly modifications in a discriminatory way. The platform probably has rules in place that enable it to block participants from joining the platform or kicking participants off. It

\textsuperscript{29} Successful anticompetitive exclusionary conduct various categories for a platform could harm overall platform competition, to the extent for example that consumers prefer platforms that give them access to multiple categories, and thereby harm competition in categories not subject to the exclusives.
could therefore simply deny rivals access to its platform. Of course, the platform could simply deny rivals access without invoking its rules, but it could cloak its motives by the sham use of governance. Rivals may not know, or be able to prove, that the platform has discriminated in applying the rules to harm them.

These cases raise the usual issues involving the use of vertical restraints to harm upstream or downstream competition. The platform benefits from the participation of firms who increase the value of the platform, including driving indirect network effects, and may provide a source of revenue. It must therefore weigh the increased profits from harming competition by the rival on one side against profits lost to the platform. That calculus depends on factors such as the extent to which customers of the rival would move to other platforms, rather than switching to the platform’s competing offering.

There may be situations in which it is possible to establish that a platform has the financial incentives to harm a rival. The platform could be essential for providing access to a large base of customers for the rival and the rival could lack practical alternatives to bypass the platform. A specific category might constitute a relevant market and destroying rivals in that category might enable the platform to secure monopoly profits that more than offset its losses from these rivals.

Aside from the standard pro-competitive explanations for vertical restraints on rivals, however, it is possible that the platform is simply applying its governance rules neutrally to mitigate negative indirect network externalities. That is apparent in the case of egregious violations of rules. Even if the platform had financial incentives to harm a rival it would appear unexceptionable if it expelled a rival that engaged in fraud or facilitated sex trafficking. The
difficult cases are where there is more room for judgment on whether the rival violated the rules, the seriousness of those violations, and whether the application was indeed neutral.

That brings us to the music wars. Apple has provided an app development platform for the iOS operating system for its iPhones since 2008. Developers can use that platform, including various tools, to write apps that make use of the operating systems and hardware features of the phone. Apple has also provided an exclusive distribution vehicle for those apps. Developers can make their apps available in the App Store and iPhone users can download apps from there. There is no other practical way for developers to distribute apps to iPhone users or for users to obtain iPhone apps. Developers also write apps for the Android operating system but that doesn’t give them access to iPhone users unless those users switch platforms.

Apple has extensive guidelines for developers amounting to about 12,000 words that lay out what they must and must not do. There is a vetting process for accepting apps, or modifications of apps, for distribution through the App Store, which is based on these guidelines and Apple’s judgment concerning the quality of the apps. There is also a set of rules for apps distributed in the App Store. Apple can remove apps from the App Store for violating these rules and expel their developers from the Apple Developer Program. There isn’t much controversy that Apple’s rules have enabled it to create a high-quality app ecosystem for the iPhone.

That doesn’t mean, however, that Apple couldn’t abuse these rules. Spotify claims that Apple has. Apple became the leading provider of downloadable music following its introduction of the iPod and the iTunes store in the early 2000s. Over the 2000s many people switched listening from CDs to downloads. When Apple launched the iPhone in 2007 it emphasized that the device combined an iPod, a phone, and a computer. It included an iPod app on the home screen.
Over the next decade, however, music streaming services such as Pandora, Spotify, Deezer, and others entered. Music consumption shifted to streaming and downloads declined sharply. Recognizing this, Apple launched Apple Music in 2015 which was a direct competitor to Spotify’s premium service. It included Apple Music on the iPhone home screen and promoted it heavily to iPhone users.

Spotify filed a complaint with the European Commission in March 2019. The following discussion is based on public statements it has made about this that relate, in particular to the application of Apple’s App Developer rules. Spotify says that Apple “introduced rules to the App Store that purposely limit choice and stifle innovation at the expense of the user experience—essentially acting as both a player and referee to deliberately disadvantage other app developers.” It claims that Apple “frequently decides to interpret (and reinterpret) [its rules] in ways to disadvantage rivals like us.” The problems worsened after Apple launched Apple Music: “Now that Apple has Apple Music, rejections of the Spotify app start becoming more and more common and they even go far as threatening to remove us from the App Store. Those rejections seem to coincide with our promotional campaign seasons.” Spotify says the rules apply differently to Apple which it claims sends out the same type of promotional push notifications that rivals are barred from doing.

Apple charges a commission fee for all paid apps and for digital content purchased within apps that are distributed through its App Store. Some of Spotify’s complaints concern alleged

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31 Id.
33 Id.
efforts to avoid the commissions for its premium service.\textsuperscript{34} For its part, Apple accuses Spotify of seeking a free ride: “After using the App Store for years to dramatically grow their business, Spotify seeks to keep all the benefits of the App Store ecosystem … without making any contributions to that ecosystem.”\textsuperscript{35} That argument, however, cuts both ways. Spotify has benefited from distribution of its free app, on which it does not pay commissions, to iPhone users. Spotify and other apps, however, have also contributed to the iPhone ecosystem, and Apple’s profits, by encouraging users to get and use iPhones. In addition to the free-riding argument, Apple denies that it blocks access for Spotify’s apps and updates.

At the end of 2019, 11 years after its launch, Spotify had 100 million subscribers globally while Apple Music had 60 million, 4 years after its launch.\textsuperscript{36} In the US, Apple has nudged ahead of Spotify in terms of paid subscribers. Both compete for listeners with their streaming music providers using various models. The case is particularly interesting because of the increased use of smartphones for consuming content and the battle over music listening which is a large and important category.

A successful strategy to harm competition could injure consumers who would have less choice and pay higher subscription fees and possibly music labels who would face an intermediary with greater bargaining power. An intervention into the neutral application of a governance system, that promotes platform quality and value, could also harm consumers and music labels. As a general matter, permitting the anticompetitive or prohibiting the

\begin{flushleft}
\textsuperscript{34} Digital apps can avoid paying commissions by having users subscribe outside of the App Store such as on a website and then using their credentials to use the app on the iPhone. Amazon, for example, does not make it possible for its app users to buy digital content, such as e-books or video, on which it would have to pay commissions, but does make it possible for its app users to buy physical goods, for which it does not have to pay commissions.
\textsuperscript{35} Apple, “Addressing Spotify’s claims,” March 14, 2019, \url{https://www.apple.com/newsroom/2019/03/addressing-spotifs-claims/}.
\textsuperscript{36} Digital Trends, “Apple Music vs. Spotify: Which service is the streaming king?” November 11, 2019, \url{https://www.digitaltrends.com/music/apple-music-vs-spotify/}.
\end{flushleft}
procompetitive use of governance systems could both impose substantial harm to the platform ecosystem—the former by weaponizing the governance system to harm competition by rivals and the latter by weakening the ability of the governance system to deter bad behavior by platform participants.

C. MFNs and Price Comparison Sites

There is an extensive literature and body of caselaw involving Most Favored Nation (MFN) clauses in contracts. Some new issues arise for digital platforms and resellers because of their widespread use of commission models. The digital intermediary charges a commission rate as a percent of the sales price, keeps the commission rate times the sales price, and pays the remainder to the seller. The commission rate is the price for distribution through the intermediary.

The contract between the digital intermediary and the seller may specify the commission rate and the price that the seller offers the product to consumers. The contract may also impose MFNs on the commission rate, to make sure it gets the highest offered fee for distribution, and the lowest price, to make sure it isn’t undercut by competing intermediaries. As a general matter this does not necessarily cause any concerns.

It can, however, when the contract is with a dominant intermediary for a category. The problem arises when the MFNs apply to the price and commission rate separately. Suppose a smaller intermediary offers the seller a lower commission rate but in return for a lower price that, on net, provide the seller with a higher net margin on sales. The smaller intermediary does this to secure a competitive advantage over the dominant intermediary. It takes a lower margin but
makes more sales. The seller and the smaller intermediary both find this deal profitable as it now stands.

Given the MFN, the dominant intermediary, however, can demand the lower price without having to agree to the lower commission. Unlike a regular MFN, it isn’t getting equality with the seller—it is securing a position of superiority—resulting in an “MFN-plus”. This MFN can lead to a problem for the rival intermediary as well as the seller who made the offer. The seller provide the lower price to the larger platform but without getting the lower commission rate in return and thereby incurs a financial penalty for entering into the deal with the smaller intermediary. Meanwhile, since the dominant intermediary matches the smaller intermediary’s price and secures a higher margin, the smaller intermediary loses the competitive advantage it sought. The dominant intermediary, however, does earn a lower margin than it did before, when it exercises the MFN, because it earns the same commission rate but on a lower price.

The MFNs by the dominant intermediary, however, could prevent the smaller intermediary from making the offer to the seller or the seller from agreeing to take. The MFN-Plus could deter the smaller intermediary from making the offer since it could end up taking a smaller commission rate but not getting additional sales since it would not have secured a competitive advantage. And it could deter the seller from taking the offer because it could lose substantial revenue by having to extend the low price to the dominant intermediary. Of course, the extent to which these incentives not to offer the low-priced deal depend on the facts of the matter including the size of the dominant intermediary.

The UK’s Competition and Markets Authority (CMA) encountered this situation. Price comparison sites provide a marketplace in which automobile insurers can sell and automobile

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owners can buy car insurance. Between 55 and 65 percent of new policies are sold through these sites. The insurers set a premium and the sites collect a commission rate on the premium. The large comparison sites entered into contracts with insurers that had a price MFN but not on the commission rate.

The CMA found evidence that some price comparison sites could not get insurers to agree to lower prices in exchange for lower commissions and that the inability to adopt the lower commission/low price strategy deterred entry by price comparison sites. It also found that the MFNs reduced commission competition as well as incentives to offer valuable features, such as fraud detection, in return for lower premiums. Ultimately consumers lost from the MFNs because they didn’t get the benefit of lower insurance prices. Of course, these conclusions were reached following a thorough investigation into the facts.

V. Conclusion

Vertical restraints in the digital world are an active area for competition authorities and private complainants and litigants. That is because of the rapid growth in the digital economy, the proliferation of digital platforms and resellers as intermediaries, the fact that some of these intermediaries also participate as sellers, and the tendency of large intermediaries to enter across many areas. If anything, this growth is likely to accelerate in the coming years as a result of the continued integration of the digital and physical economies, which will be further spurred by widespread deployment of 5G technologies.

Analyzing vertical restraints is seldom simple. It is no easier, and arguably more complex, in the digital world. There are opportunities for engaging in anticompetitive behavior especially in ways that, given the use of algorithms and governance systems, may be less
transparent, and harder to prove, than in the physical world. But at the same time there are many compelling sources of efficiency which courts and competition authorities would not want to disturb. As noted above for governance systems, the costs of false positives and false negatives may both be high.

The digital world does not appear to be one in which presumptions are very powerful aside from the usual one that anticompetitive behavior usually requires substantial market power in a relevant antitrust market. Determining whether vertical practices are anticompetitive, innocuous, or procompetitive on balance requires a fact-based analysis informed by sound economics, particularly the modern economic analysis of multisided platforms. Given possibly large and symmetric error costs the payoffs to methodical economic and empirical analysis are substantial.
Diagnosing Anticompetitive Effects of Vertical Integration by Multiproduct Firms*

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Abstract

The 2020 Vertical Merger Guidelines assume that the elimination of double marginalization caused by vertical integration is procompetitive. A body of research shows that this assumption may fail to hold in multiproduct industries. In this paper, we present a model of a vertical supply chain to analyze equilibrium effects of vertical integration, which we use to shed light on when an elimination of double marginalization may fail to be procompetitive in multiproduct industries. In particular, we discuss diversion ratios as a tool for diagnosing anticompetitive effects.

Keywords: vertical integration, multiproduct firms, elimination of double marginalization, diversion ratios

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1 Introduction

The 2020 Vertical Merger Guidelines characterize vertical mergers as transactions that “often benefit consumers through the elimination of double marginalization, which tends to lessen the risks of competitive harm”. While this assumption seems intuitive, a small body of research suggests that it may fail to hold when the integrated firm is a multiproduct firm (Salinger, 1991, Luco and Marshall, 2020). Given that vertical mergers in multiproduct industries are common, we complement existing work and investigate when such an assumption can be made in vertical transactions involving multiproduct firms.

Why can we not generally assume an elimination of double margins to be procompetitive in multiproduct industries? Consider the case when a subset of the products sold by a firm is exposed to an elimination of double margins. This has two effects on pricing incentives (Salinger, 1991). First, it reduces the downstream firm’s perceived cost of selling the products with eliminated double margins (integrated products, henceforth), thereby inducing the firm to set lower prices for these goods (efficiency effect). Second, it makes integrated products more profitable to sell, which creates an incentive to increase the prices of unintegrated substitute products so as to sell more units of the integrated ones (anticompetitive effect). Salinger (1991) shows examples where the anticompetitive effect may dominate the efficiency effect and lead to a loss in consumer welfare caused by vertical integration. Empirical evidence in Luco and Marshall (2020) from vertical transactions in the US carbonated-beverage industry suggest that the anticompetitive effect can be as large as the efficiency effect (in absolute value). Combined, these works suggest that the elimination of double margins caused by vertical integration cannot be blindly assumed procompetitive in multiproduct industries.

1Vertical Merger Guidelines, 2020, pp. 2.

2Vertical transactions involving multiproduct firms include, for example, mergers in the carbonated-soda industry (e.g., The Coca-Cola Company’s acquisition of Coca-Cola Enterprises in 2010); mergers in the eyewear industry (e.g., the merger between Luxottica and Essilor in 2018); mergers between retailers and one of their suppliers (e.g., McKesson Canada Corporation’s acquisition of Rexall Pharmacy Group Ltd. (2016) and Uniprix (2017), Brown Shoe Co., Inc.’s acquisitions of Wohl Shoe Company and Wetherby-Kayser in 1951 and 1953, respectively); mergers between health insurance companies and hospitals and clinics (e.g., Humana’s acquisition of Concentra in 2010, WellPoint Inc.’s acquisition of CareMore Health Group in 2011); mergers in the media industry (e.g., AT&T’s acquisition of Time Warner and Disney’s acquisition of 21st Century Fox, both in 2019); mergers between drug manufacturers and pharmacy benefit managers (e.g., Merck & Co., Inc.’s acquisition of Medco Managed Care, L.L.C. in 1993, Eli Lilly and Company’s acquisition of McKesson Corporation in 1995); and joint ventures in network industries (e.g., MCI Communications Corporation’s joint venture with British Telecommunications PLC in 1994); among others.
Our contributions are twofold. First, we provide a detailed discussion on the impact of an elimination of double margins on pricing incentives in multiproduct industries. Second, we present a model of vertical supply chain to analyze equilibrium effects of vertical integration. We use our analysis to shed light on when the anticompetitive effects caused by an elimination of double margins are more likely to arise. In particular, we discuss how diversion ratios—a tool that is commonly used in merger evaluation—can be used to diagnose whether vertical integration will cause an increase in the prices of unintegrated products. Because computing diversion ratios requires only demand estimates (though other data such as customer surveys could be used), this approach to screening proposed transactions is particularly useful as it saves the researcher and relevant antitrust agencies from having to model the entire vertical chain to predict price changes caused by a vertical merger.

The paper is organized as follows. Section 2 presents an economic discussion of the impact of vertical integration on the pricing incentives of a multiproduct firm. We introduce our model in Section 3, and Section 4 presents the equilibrium analysis of vertical integration as well as our discussion about diversion rates as a diagnostic tool. Section 5 concludes.

2 Multiproduct Pricing and Vertical Integration

In this section, we discuss the impact of vertical integration on the pricing incentives of a multiproduct firm. The focus of this section is to identify the various economic effects caused by vertical integration, and we postpone the discussion of how these effects interact in equilibrium until the next section.

We consider a downstream monopolist retailer selling two substitute products, products 1 and 2, which are produced by two separate upstream firms, $U_1$ and $U_2$, respectively. The downstream firm purchases these products at wholesale (linear) prices $w_1$ and $w_2$ and then resells them at prices $p_1$ and $p_2$. We assume that up-

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3 Our proposal to use diversion ratios as a diagnosis tool is similar to the one in Moresi and Salop (2013), who propose using measures of vertical gross upward pricing pressure, vGUPPIs. The main differences are that we examine within-firm diversion in the context of multiproduct firms, and that our proposal requires no information about the vertical structure of the industry.

4 See the current Horizontal Merger Guidelines, sections 4.1.3 and 6.1, and Conlon and Mortimer (2020) for a detailed discussion on diversion ratios and their estimation.

5 Alternatively, we can think of the downstream firm as one that manufactures both products, with upstream firm $U_j$ supplying all the necessary inputs for product $j$.

6 See, for example, Luco and Marshall (2020) and Marshall (2020) for evidence on the use of linear prices along the vertical supply chain. More in general, the issues that we discuss in this article arise as long as the pricing scheme of the upstream firms exhibit a linear component with a
stream firms choose their wholesale prices (i.e., upstream firms have all the bargaining power). For simplicity, we assume here that upstream firms face no production costs and the retailer’s marginal cost of selling product \( j \) is \( w_j \) (i.e., the retailer faces no costs other than the input costs), but we relax these assumptions in the next section.

The multiproduct pricing problem of the downstream retailer is

\[
\max_{p_1,p_2} q_1(p_1,p_2)(p_1 - w_1) + q_2(p_1,p_2)(p_2 - w_2),
\]

where \( w_1 \) and \( w_2 \) are wholesale prices that the downstream firm takes as given. The demand for the goods are given by \( q_1(p_1,p_2) \) and \( q_2(p_1,p_2) \), and because the products are assumed substitutes, the cross-price effects of demand are positive (i.e., \( \partial q_1 / \partial p_2 > 0 \)). The equilibrium prices, \( p_1^* \) and \( p_2^* \), solve the first-order necessary conditions

\[
\begin{align*}
q_1(p_1^*,p_2^*) + (p_1^* - w_1) \frac{\partial q_1}{\partial p_1} + (p_2^* - w_2) \frac{\partial q_2}{\partial p_1} & = 0 \\
q_2(p_1^*,p_2^*) + (p_2^* - w_2) \frac{\partial q_2}{\partial p_2} + (p_1^* - w_1) \frac{\partial q_1}{\partial p_2} & = 0.
\end{align*}
\]

(1)

For ease of exposition, we will postpone our discussion about how upstream firms choose their prices until the next section.

Consider now a vertical merger between the downstream retailer and upstream firm \( U_1 \). Vertical integration eliminates double marginalization, which causes the wholesale price of product 1 to drop to zero, as we have assumed \( U_1 \) faces no production costs. We assume that \( w_2 \) remains at its pre-merger value for ease of exposition, but we relax this assumption in the rest of the paper. Then, at the premerger prices \( p_1^* \) and \( p_2^* \), we can establish the following inequalities capturing the change in pricing incentives of the multiproduct firm,

\[
\begin{align*}
q_1(p_1^*,p_2^*) + p_1^* \frac{\partial q_1}{\partial p_1} + (p_2^* - w_2) \frac{\partial q_2}{\partial p_1} & < 0 \\
q_2(p_1^*,p_2^*) + (p_2^* - w_2) \frac{\partial q_2}{\partial p_2} + p_1^* \frac{\partial q_1}{\partial p_2} & > 0.
\end{align*}
\]

We establish the signs of these inequalities using the assumptions that demand is downward sloping (i.e., \( \partial q_1 / \partial p_1 < 0 \)) and products are substitutes (i.e., \( \partial q_1 / \partial p_2 > 0 \)), as well as by noting that vertical integration eliminates the terms \(-w_1 \partial q_1 / \partial p_1 \) (positive) and \(-w_1 \partial q_1 / \partial p_2 \) (negative) from the left-hand side of the first-order conditions of products 1 and 2 in equation (1), respectively.
These inequalities isolate the two effects of vertical integration on pricing incentives. First, the elimination of double marginalization makes product 1 cheaper to sell (i.e., $w_1$ drops to zero), which creates an incentive to decrease the price of product 1. This is the efficiency effect of the elimination of double marginalization. Second, the eliminated double margin in product 1 makes product 1 more profitable to sell (at the pre-merger prices, its margin increases from $p_1^* - w_1$ to $p_1^*$), which creates an incentive to increase the price of product 2 (a substitute of product 1) so as to incentivize consumers to choose (the now more profitable to sell) product 1.\(^7\) In our prior work, we call this anticompetitive effect the Edgeworth-Salinger effect (Luco and Marshall, 2020).\(^8\)

As argued in Salinger (1991) and Luco and Marshall (2020), the Edgeworth-Salinger effect is an anticompetitive effect that counteracts the efficiency effect and may cause price increases. The Edgeworth-Salinger effect is a form of customer foreclosure, as vertical integration changes the downstream firm’s incentives to sell the unintegrated product.\(^8\) Luco and Marshall (2020) provide evidence that the magnitude of the anticompetitive effect can be as large as the efficiency effect (in absolute value), which suggests that the elimination of double marginalization cannot be blindly assumed as procompetitive in multiproduct industries.

We finish this section by noting that the impact of vertical integration on equilibrium prices will depend on the interplay of both the efficiency and Edgeworth-Salinger effects. The efficiency effect may well overwhelm the Edgeworth-Salinger effect, but the evidence in Luco and Marshall (2020) and the examples in Salinger (1991) featuring price increases in unintegrated (and even integrated) products show that this is not generally true.

### 3 Equilibrium Effects of Vertical Integration

To examine how vertical integration impacts market outcomes, we use a model similar to the ones commonly used for merger evaluations. The model allows us to assess when the anticompetitive effects of vertical integration in multiproduct industries are likely to cause harm.

\(^7\)Naturally, upstream firm $U_2$ will have incentives to decrease $w_2$ to counteract the Edgeworth-Salinger effect. We incorporate this response into our analysis next section.

\(^8\)See Salop (2018) for a discussion about the various forms of foreclosure caused by vertical integration.
3.1 Demand

In our model, each consumer decides whether to purchase one of the inside goods or the outside option \((j \in 0, 1, \ldots, J, \text{ with the outside option labeled } j = 0)\). The indirect utility function of consumer \(i\) of purchasing inside good \(j\) is

\[
\begin{equation}
\[u_{ij} = -\alpha p_j + \xi_j + \epsilon_{ij}, \quad (2)\]
\end{equation}
\]

where \(p_j\) is the price of good \(j\), \(\xi_j\) is an unobserved (from the perspective of the econometrician) product attribute, such as quality, and \(\epsilon_{ij}\) is an idiosyncratic shock. As is standard, we normalize the utility of the outside option to be \(u_{i0} = \epsilon_{i0}\).

We assume that the idiosyncratic taste shocks have a nest structure. Specifically, we define two groups of products. The first group, \(g = 0\), contains the outside option only, while the second group, \(g = 1\), contains the inside goods. The vector of idiosyncratic taste shocks, \(\epsilon_i = (\epsilon_{i0}, \epsilon_{i1}, \ldots, \epsilon_{iJ})\) have the following joint cumulative distribution function

\[
G(\epsilon) = \exp \left\{-\exp\{-\epsilon_0\} - \left( \sum_{j \in \{1, \ldots, J\}} \exp\{-\epsilon_j\} \right)^\sigma \right\}, \; \sigma \in (0, 1],
\]

which allows for correlation between the taste shocks of the inside goods, \((\epsilon_{i1}, \ldots, \epsilon_{iJ})\) approximately given by \(1 - \sigma\), while keeping \(\epsilon_{i0}\) independent from the idiosyncratic taste shocks of the inside goods. This specification is commonly known as the Nested Logit model, which accommodates the special case of the Logit model when \(\sigma = 1\) (i.e., all taste shocks are independent).\(^9\)

3.2 Supply

We consider a market with \(U\) upstream firms, each producing a single product that they sell to a downstream retailer. We assume that linear prices are used in all transactions along the vertical chain, and that upstream firms have all the bargaining power when setting wholesale prices. The wholesale price of product \(j\) set by upstream firm \(U_j\) is given by \(w_j\), while the retail price set by the retailer for product \(j\) is \(p_j\). We assume that the upstream firm \(U_j\)’s marginal cost of producing product \(j\) is \(c_j^u\), and the retailer’s marginal cost of selling a unit of product \(j\) is \(w_j + c_j^r\). The market share of product \(j\), given a vector of retail prices \(p\), is given by \(s_j(p)\).

\(^9\)See, for example, Miller and Weinberg (2017) for an empirical implementation of this demand system.
We describe the pricing problem of each type of firm in reverse order, as we solve the game by backward induction. We start considering the case without vertical integration. In this case, the downstream firm sets its prices taking as given the vector of wholesale prices set by the upstream firms, \(\mathbf{w}\), and solves the problem

\[
\max_{\{p_j\}_{j \in J}} \sum_{j \in J} (p_j - w_j - c^r_j)s_j(p).
\]

The equilibrium retail prices solve the first-order conditions of the multiproduct monopolist,

\[
0 = s_j + \sum_{k \in J} \frac{\partial s_k(p)}{\partial p_j} (p_k - w_k - c^r_k), \quad \forall j \in J.
\]

(3)

We define \(p(w)\) to be the vector of best-response retail prices when the wholesale prices are given by \(\mathbf{w}\).

Every upstream firm \(U_j\) chooses its wholesale price \(w_j\) given the vector of input costs \(c^u\) and taking into consideration how their wholesale prices affect the vector of equilibrium retail prices, \(p(w)\). Upstream firm \(U_j\) solves the problem

\[
\max_{w_j} (w_j - c^u_j)s_j(p(w)),
\]

and the equilibrium wholesale prices solve the first-order necessary conditions

\[
0 = s_j(p(w)) + \sum_{h \in J} \frac{\partial s_j(p(w))}{\partial p_h} \frac{\partial p_h(w)}{\partial w_j} (w_j - c^u_j), \quad \forall j \in J.
\]

(4)

Equilibrium strategies are given by the wholesale price vector \(\mathbf{w}\) and the correspondence \(p(w)\) that simultaneously solve equations (3) and (4).

We next consider the case where the downstream firm vertically integrates with upstream firm \(U_1\). The problem of the downstream firm and upstream firms remain the same except for the elimination of double margins in product 1, as described in the previous section. That is, the integrated firm’s cost of selling the integrated product equals the upstream marginal cost (i.e., \(w_1 = c^u_1\)) after vertical integration. The elimination of double marginalization impacts the pricing decisions of the downstream firm, but the best-response function \(p(w)\) does not change. Unintegrated upstream firms still choose their prices by solving equation 4, but their price choices change as their equilibrium beliefs about \(w_1\) are updated to \(w_1 = c^u_1\).
3.2.1 An extension

A variation of our model follows Miller and Weinberg (2017) in assuming that the retail prices are determined by the system of equations

$$0 = \lambda s_j + \sum_{k \in J} \frac{\partial s_k(p)}{\partial p_j} (p_k - w_k), \quad \forall j \in J,$$

(5)

where $\lambda \in [0,1]$. This system of equations is identical to the system in equation (3) except for the presence of the retail scaling parameter $\lambda$. The parameter $\lambda$ scales the retail markups between zero ($\lambda = 0$) and the monopoly markups ($\lambda = 1$), and allows us to capture the competitive pressure faced by the retailer in a simple way.

3.3 Implementation

The parameters of the model include the demand parameters ($\alpha, \{\xi_j\}_{j \in J}, \sigma$), the marginal costs of production of upstream firms $\{c^u_j\}_{j \in J}$, the marginal costs of the retailer $\{c^r_j\}_{j \in J}$, and the retail scaling parameter $\lambda$. Given a set of parameter values, we solve for the equilibrium before and after vertical integration. Throughout our analysis, we assume that the downstream retailer vertically integrates with the upstream producer $U_1$ (i.e., the maker of product 1). Our baseline analysis assumes $J = 2$, i.e., two inside goods and an outside option, though we also present results for markets with more goods. We solve the game numerically using a MATLAB code that we make available to the public.

4 Equilibrium analysis

In this section, we present the impact of vertical integration on the retail prices of both the integrated product (the efficiency effect of vertical integration) and the unintegrated product (Edgeworth-Salinger effect) as well as other equilibrium objects of interest. As was previously mentioned, we assume that the downstream retailer vertically integrates with the upstream producer $U_1$. That is, product 1 becomes the integrated product and product 2 the unintegrated product after vertical integration.

Figure 1 presents the first set of results. Panel A shows that the efficiency effect of vertical integration leads to price decreases in the integrated product of up to 32 percent, with great variation depending on the particular choice of parameters. In addition, Panel A shows that the magnitude of the efficiency effect of vertical integration is increasing in $\sigma$ (recall, the correlation in the idiosyncratic taste shocks of both products is approximately given by $1 - \sigma$). That is, the efficiency effect is
largest when the taste shocks are independent and smallest in the case of perfect substitutes (i.e., no product differentiation), all else equal. We explain these findings in detail below.

Panel B shows that the Edgeworth-Salinger effect of vertical integration can cause increases in the price of unintegrated products of up to 2.5 percent, but the effect may also be overwhelmed by the efficiency effect of vertical integration due to the strategic complementarity of prices, which can result in the price of the unintegrated product to decrease as a consequence of vertical integration despite the upward pricing pressure exerted by the Edgeworth-Salinger effect. The figure shows that price increases in the unintegrated products arise for large values of $\sigma$, i.e., when products are more horizontally differentiated.

Panel C shows that the price of the unintegrated product becomes greater relative to the price of the integrated product as $\sigma$ increases. We explain this relationship using diversion ratios (i.e., $-\frac{\partial s_2/\partial p_1}{\partial s_1/\partial p_1}$), which measure how much of a quantity decrease in product 1 caused by an increase in $p_1$ is captured by product 2. Panel D shows the diversion ratio before vertical integration as a function of $\sigma$ and shows that the diversion ratio decreases in $\sigma$. Now to understand this relationship in Panel C, recall that vertical integration makes product 1 more profitable to sell, which motivates the downstream retailer to divert demand away from product 2 to boost the sales of product 1. The downstream firm has two ways of doing this: decreasing $p_1$ and increasing $p_2$. When products are perceived as close substitutes (small $\sigma$), the diversion ratio is high, in which case a small decrease in $p_1$ is sufficient to divert demand towards product 1. When products are perceived as more differentiated (large $\sigma$), the diversion ratio is low, in which case a small decrease in $p_1$ has a limited effect in diverting demand towards product 1. Hence, the downstream firm must complement a decrease in $p_1$ with an increase in $p_2$ to boost the sales of product 1. As products become more differentiated (large $\sigma$), the firm has to become more aggressive in both decreasing $p_1$ and increasing $p_2$ to divert demand towards product 1, which explains the patterns in Panels A-C.

Figure 2 is similar to Figure 1, but presents the impact of a demand shifter that is common to both inside options (i.e., $\xi_1 = \xi_2$) on the equilibrium objects. Crucially, Panel C shows that an increase in the demand shifter makes the unintegrated product relatively cheaper than the integrated product. This again can be explained by the effect of the demand shifter on diversion ratios. An increase in $\xi$ leads to an increase in the diversion ratio because the inside goods become more attractive relative to the outside option, which implies that consumers are more likely to substitute towards an inside good than to the outside option. For this reason, an increase in $\xi$ requires the downstream firm to be less aggressive in both decreasing
$p_1$ and increasing $p_2$ to divert demand towards product 1.

Our numerical examples suggest that vertical integration increases consumer welfare on average. The welfare gains are driven by the efficiency effect of the elimination of double marginalization, which in our examples are larger in magnitude than the Edgeworth-Salinger effect (in absolute value). Hotelling (1932) and Salinger (1988), however, provide examples where welfare unambiguously decreases with vertical integration. In these examples, the Edgeworth-Salinger effect overwhelms the efficiency effect and causes all equilibrium prices to increase. These examples are special in that they feature asymmetric Slutsky matrices (i.e., $\partial q_j/\partial p_i \neq \partial q_i/\partial p_j$), which are often viewed as a departure from consumer rationality (Aguiar and Serrano, 2017).

Though one may be tempted to consider these cases to be exceptions rather than the norm, the range of industries in which consumer behavior is consistent with consideration set formation is large enough so as to warrant the attention of practitioners and researchers. Examples studied in the literature include consideration sets that arise from consumer search being costly or consumers facing information asymmetries (Goeree, 2008 and Pires, 2016), settings in which consumers consider only the highest ranked products according to some measure (Honka, 2014, Honka et al., 2017), settings in which default options play an important role (Hortacsu et al., 2017, Abaluck and Adams, 2017, and Dressler and Weiergraeber, 2019), and settings in which incumbency status may be relevant (Gugler et al., 2018), among others.10 This evidence offers certain plausibility to the examples in Hotelling (1932) and Salinger (1988) and suggest that measuring diversion ratios without ex-ante imposing Slutsky matrix symmetry may be a good practice (Hendel et al., 2017). Further, this may explain why the anticompetitive effect estimates in Luco and Marshall (2020)—which were computed without imposing demand function restrictions—are so large relative to the efficiency effect estimates.

4.1 Extensions

4.1.1 Downstream competition

In Sections 3 and 4, we examine the impact of vertical integration on pricing incentives in the context of a downstream monopolist. Our findings, however, do not depend on this assumption. As we explained in subsubsection 3.2.1, we follow Miller and Weinberg (2017) in incorporating downstream competition in the analysis using a scaling parameter $\lambda \in [0, 1]$ that scales retail markups between those of a mo-

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10When consumers form consideration sets, consumers are choosing to consider only a subset of the full set of products available to them.
ropolist ($\lambda = 1$, our baseline) and zero ($\lambda = 0$) (see equation (5)). We find that our economic analysis is robust to values of $\lambda$ smaller than one. The exception is when the value of $\lambda$ is so small that double marginalization does not arise in equilibrium (specifically, when $\lambda$ is less than 0.35 in our simulations), in which case vertical integration has a small impact on the pricing incentives of the downstream retailer.\textsuperscript{11}

4.1.2 Upstream competition

Our baseline specification considers the case with $J = 2$ inside goods. We explore whether the Edgeworth-Salinger effect can also arise in markets with more goods. To this end, we compute the equilibrium of our model allowing for up to 15 products in the particular case when $\sigma = 1$ (i.e., the Logit model). Across all these specifications, we see that vertical integration impacts pricing incentives as described above, although the effects vary in magnitude with the number of products.

5 Discussion

In contrast to the assumption in the 2020 Vertical Merger Guidelines, our findings suggests that an elimination of double margins may cause anticompetitive price increases in multiproduct industries. Our equilibrium analysis shows that these anticompetitive price effects are more likely to arise when the diversion ratio between products is low (i.e., when products are more distant substitutes), which renders diversion ratios a useful tool in diagnosing whether vertical integration will cause price increases in the unintegrated product.

Diversion ratios are already commonly used when screening horizontal mergers (see, for example, the 2010 Horizontal Merger Guidelines, Farrell and Shapiro, 2010, Conlon and Mortimer, 2020). Using them to screen vertical mergers has the added benefit that it saves the researcher from having to specify a model of the vertical supply chain to make predictions about price changes caused by vertical integration. In fact, computing diversion ratios requires demand estimates only as well less data and fewer assumptions than what would be needed to estimate a model of the vertical supply chain.

\textsuperscript{11}Double marginalization does not arise when $\lambda$ is small because competition is so intense that the retailer must absorb the entirety of the (perceived) cost increase.

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References


Figure 1: Impact of vertical integration on retail prices, as a function of $\sigma$

Notes: The parameters $\alpha$ and $\xi = \xi_1 = \xi_2$ are reported in the legend. The parameter $\sigma$ is reported on the $x$-axis. $c_j^s$ and $c_j^u$ are set at 0.5 for $j = 1, 2$. 

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Figure 2: Impact of vertical integration on retail prices, as a function of $\xi$

Notes: The parameters $\alpha$ and $\sigma$ are reported in the legend. The parameter $\xi = \xi_1 = \xi_2$ is reported on the x-axis. $c_j^f$ and $c_j^u$ are set at 0.5 for $j = 1, 2$. 

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The Competitive Impact of Vertical Integration by Multiproduct Firms*

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Abstract

We study the impact of vertical integration on pricing incentives in multiproduct industries. To do so, we exploit recent variation in vertical structure in the U.S. carbonated-beverage industry. While the elimination of double marginalization with vertical integration is normally characterized as procompetitive, economic theory predicts that it may cause anticompetitive price increases in multiproduct industries. We indeed find that vertical integration causes price decreases in products with eliminated double margins but price increases in the other products sold by the integrated firm. These results provide new evidence of anticompetitive effects of vertical mergers.

Keywords: vertical integration, multiproduct firms, carbonated-beverage industry

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1 Introduction

A series of recent high-profile vertical mergers (e.g., AT&T and Time Warner, CVS and Aetna, Comcast and NBC Universal, Google and ITA Software) has reinvigorated the long-standing debate on the impact of vertical integration on consumer welfare and market efficiency (Salop, 2018, Federal Trade Commission, 2018, Baker et al., 2019, Salop, 2019, Slade and Kwoka Jr, 2019, among others). This paper contributes to this debate by providing new empirical evidence of the competitive impact of vertical mergers in multiproduct industries. We show that the elimination of double marginalization caused by vertical integration introduces anticompetitive pricing incentives when the vertical merger involves a multiproduct firm. These findings stand in contrast to the common intuition that the elimination of double marginalization is benign.

The anticompetitive incentives that we examine arise when a subset of the products sold by a firm are exposed to an elimination of double marginalization. In this context, vertical integration impacts pricing incentives in two ways. On the one hand, the products with eliminated double margins become cheaper to sell, which creates a downward pressure on the prices of these goods. This is the efficiency effect associated with the elimination of double marginalization. On the other hand, products with eliminated double margins become relatively more profitable to sell. This gives the firm incentives to divert demand toward these products by increasing the prices of products for which double marginalization was not eliminated. We call this the Edgeworth-Salinger effect. This is an anticompetitive effect that counteracts the efficiency effect of vertical integration and may lead to price increases (Edgeworth, 1925, Hotelling, 1932, Salinger, 1991).

These incentives were present in a broad set of past vertical transactions in multiproduct industries. These transactions include, for example, mergers in the media industry (e.g., AT&T’s acquisition of Time Warner and Disney’s acquisition of 21st Century Fox, both in 2019); mergers in the eyewear industry (e.g., the merger between Luxottica and Essilor in 2018); health insurance companies acquiring hospitals and clinics (e.g., Humana’s acquisition of Concentra in 2010, WellPoint Inc.’s acquisition of CareMore Health Group in 2011); drug manufacturers acquiring pharmacy benefit managers (e.g., Merck & Co., Inc.’s acquisition of Medco Managed Care, L.L.C. in 1993, Eli Lilly and Company’s acquisition of McKesson Corporation in 1995); retailers integrating with one of their suppliers (e.g., McKesson Canada Corporation’s acquisition of Rexall Pharmacy Group Ltd. (2016) and Uniprix (2017), Brown Shoe Co., Inc.’s acquisitions of Wohl Shoe Company and Wetherby-Kayser in 1951 and 1953, respectively); and joint ventures in network industries (e.g., MCI Communications Corporation’s joint venture with British Telecommunications PLC in 1994); among others.

This name gives credit to Francis Edgeworth’s work on how taxes affect the pricing incentives of multiproduct firms (Edgeworth, 1925) and Michael Salinger’s theoretical work linking Edgeworth’s work to the analysis of vertical mergers (Salinger, 1991).
The main contributions of this paper are twofold. First, we provide causal estimates of these efficiency and anticompetitive effects of vertical integration in the context of the carbonated-beverage industry in the United States. We do so by leveraging rich variation in vertical structure caused by a recent wave of vertical integration in this industry. Second, we discuss the implications of our findings for the ongoing debate on vertical-merger enforcement.

At least three factors make the carbonated-beverage industry ideal for the purposes of our study. First, this industry is one where multiple upstream and downstream firms interact. Upstream firms such as The Coca-Cola Company or PepsiCo produce concentrate; downstream bottlers purchase concentrate from the upstream firms, mix it with carbonated water, and produce the multiple products that are sold to retailers. Importantly, bottlers purchase concentrate from one or more upstream firms. For example, The Coca-Cola Company’s main bottler bottles both The Coca-Cola Company brands and Dr Pepper Snapple Group brands in many locations across the United States.

Second, a number of vertical transactions took place in 2009 and 2010 involving The Coca-Cola Company, PepsiCo, and some of their bottlers. Because The Coca-Cola Company and PepsiCo merged with only a subset of their bottlers, vertical integration took place in only some parts of the country. This geographical variation in vertical integration generated rich longitudinal and cross-sectional variation in vertical structure, which is key for our identification strategy.

Third, the transactions that took place in 2009 and 2010 eliminated double marginalization for the brands owned and bottled by The Coca-Cola Company and PepsiCo. However, because Dr Pepper Snapple Group remained independent in selling inputs to the bottlers, double marginalization was not eliminated for Dr Pepper Snapple Group’s brands bottled by the integrated bottlers. As a consequence of this partial elimination of double marginalization, we expect these vertical transactions to have yielded both the efficiency and the Edgeworth-Salinger effects of vertical integration.

To measure the effects of vertical integration on prices, we use a unique combination of data sources. We use weekly scanner data at the product–store level for 50 metropolitan areas in the United States from the IRI Marketing Data Set (Bronnenberg et al., 2008). We complement these data with industry publications and Federal Trade Commission documents to identify the products exposed to vertical integration in each store in the scanner data.
The rich heterogeneity in vertical structure resulting from the mergers allows us to identify the causal effects of vertical integration on prices using two complementary research designs that rely on different sources of variation and identification assumptions. First, we compare the price changes of a product across locations differentially exposed to vertical integration (i.e., a differences-in-differences analysis); second, we compare the price changes within a store across products differentially exposed to vertical integration (i.e., a within-store analysis).

We find that vertical integration caused price increases of 1.2 to 1.5 percent for Dr Pepper Snapple Group products bottled by vertically integrated bottlers. Estimates allowing for dynamic effects also show that these price increases started only after the vertical transactions took place, and the price increases persisted in time. Vertical integration also caused a decrease of 0.8 to 1.2 percent in the prices of The Coca-Cola Company and PepsiCo products bottled by integrated bottlers, though some of these efficiency-effect estimates are noisy. Finally, we also show that while vertical integration increased the revenues of The Coca-Cola Company and PepsiCo products, vertical integration decreased the revenues of Dr Pepper Snapple Group products by 1.3 percent relative to their revenues in areas unaffected by vertical integration. These results are consistent with joint manifestations of the efficiency and Edgeworth-Salinger effects of vertical integration.

From a policy perspective, our work contributes to the ongoing debate on vertical-merger enforcement in at least three ways. First, we provide new causal evidence of the anticompetitive effects of vertical mergers. Second, our estimates of the anticompetitive effects are as large or larger in absolute value than the efficiency effects of vertical integration. This suggests that the elimination of double marginalization cannot be presumed to be procompetitive when examining vertical integration by multiproduct firms. Lastly, we argue that these anticompetitive pricing incentives of vertical integration were relevant for many vertical transactions that have taken place in the last decades (see Footnote 1). These points combined call for the Edgeworth-Salinger effect to be incorporated in the evaluation of future vertical-merger enforcement actions.

Our research also contributes to a recent empirical literature on how changes in market structure affect market outcomes in bilateral oligopoly. Ho and Lee (2017) study the impact of insurer competition in the U.S. health care industry and show that the relationship between insurer competition and insurance premiums is ambiguous because of bargaining externalities. Gowrisankaran et al. (2015) study the impact
of hospital mergers on hospital prices when the prices are the result of negotiations between hospitals and managed-care organizations. Crawford et al. (2018) study the impact of vertical integration on welfare in the U.S. pay-television industry and find that vertical integration can result in the integrated firm either refusing to sell some of its content to rival firms or selling it but at higher prices. We contribute to this strand of the literature by providing new evidence of anticompetitive pricing effects that arise when a multiproduct firm vertically integrates with a subset of its suppliers.


We contribute to this literature by providing causal evidence of the anticompetitive effects that are unique to vertical mergers involving multiproduct firms. These effects are distinct from the foreclosure and related pricing effects that have dominated economists’ thinking in this area (see Section 2).

Finally, we contribute to an empirical literature studying the vertical arrangements between upstream and downstream firms. Villas-Boas (2007) and Bonnet and Dubois (2010) compare different models of vertical relationships between manufacturers and retailers. Both studies find evidence in favor of nonlinear pricing. These findings are in contrast with our estimates of the price effects of vertical integration, which suggest the existence of a linear-pricing component along the vertical chain.

The paper is organized as follows. Section 2 presents a conceptual discussion of the impact of vertical integration on the pricing incentives of a multiproduct firm. The industry background for our empirical analysis and a description of the data are presented in Sections 3 and 4, respectively. Section 5 presents our empirical framework and the main results of our analysis of the effects of vertical integration on prices.

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3 See Lafontaine and Slade (2007) and Slade (2019) for a review of this literature.

4 Other recent empirical studies on vertical integration include Mortimer (2008), Houde (2012), Lee (2013), Atalay et al. (2014), and Asker (2016).
We discuss our analysis on the impact of vertical integration on the revenues of the upstream firms in Section 6. We conclude in Section 7 with a discussion of policy implications.

2 Multiproduct Pricing and Vertical Integration

To examine the impact of vertical integration on the pricing incentives of a multiproduct firm, consider the following example in which an independent downstream monopolist (henceforth, “the bottler”) sells two substitute products, product 1 and product 2, at prices $p_1$ and $p_2$. The bottler produces product 1 using an input it purchases from the upstream firm $U_1$, and it produces product 2 using an input it purchases from the upstream firm $U_2$. In this setting the first-order necessary conditions for the equilibrium prices set by the bottler, $p_1^*$ and $p_2^*$, are given by

$$q_1(p_1^*, p_2^*) + (p_1^* - c_1) \frac{\partial q_1}{\partial p_1} + (p_2^* - c_2) \frac{\partial q_2}{\partial p_1} = 0$$

$$q_2(p_1^*, p_2^*) + (p_2^* - c_2) \frac{\partial q_2}{\partial p_2} + (p_1^* - c_1) \frac{\partial q_1}{\partial p_2} = 0,$$

where $c_1$ and $c_2$ are the input costs of the bottler.

Consider now a vertical merger between upstream firm $U_1$ and the bottler. Vertical integration eliminates the double margin in product 1, which causes the input cost of product 1 to drop to the marginal cost of production of the input producer (i.e., zero in this example). For simplicity, assume that $c_2$ remains at its original value (we relax this assumption below). Then, at the premerger prices $p_1^*$ and $p_2^*$, we have that

$$q_1(p_1^*, p_2^*) + p_1^* \frac{\partial q_1}{\partial p_1} + (p_2^* - c_2) \frac{\partial q_2}{\partial p_1} < 0$$

$$q_2(p_1^*, p_2^*) + (p_2^* - c_2) \frac{\partial q_2}{\partial p_2} + p_1^* \frac{\partial q_1}{\partial p_2} > 0,$$

both because demand is downward sloping (i.e., $\partial q_1/\partial p_1 < 0$) and the products are substitutes (i.e., $\partial q_1/\partial p_2 > 0$). These inequalities suggest that vertical integration has two effects on prices. First, the elimination of the double margin creates an incentive to decrease the price of product 1 because of its lower marginal cost. This corresponds to the efficiency effect of eliminating double marginalization. Second, the elimination of the double margin in product 1 gives the bottler greater marginal incentives to sell this
product because it now earns the bottler a higher margin (i.e., $p_1^*$ versus the premerger margin of $p_1^* - c_1$). This creates an incentive to increase the price of product 2 to induce consumers to choose product 1 instead of product 2. This anticompetitive effect, which we call the Edgeworth-Salinger effect, only exists in the context of multiproduct firms.\footnote{We acknowledge that input transactions along the vertical chain may involve nonlinear prices. We note, however, that the Edgeworth-Salinger effect will arise as long as the unit price in the vertical contract has a nonzero markup.}

How the efficiency and Edgeworth-Salinger effects impact equilibrium prices depends on the magnitude of the efficiency gains as well as the degree of substitution between products. Because prices are strategic complements and the efficiency and Edgeworth-Salinger effects push prices in opposite directions, the impact of vertical integration on equilibrium prices is theoretically ambiguous. That is, if the Edgeworth-Salinger effect is sufficiently large, the price of product 1 could stay constant or increase relative to the premerger equilibrium price despite the downward pressure on $p_1$ caused by the efficiency effect. This is illustrated in Salinger (1991), who shows examples featuring an increase in the price of product 2 and even an increase in the price of both products in equilibrium.

Section A in the Online Appendix extends this analysis both by adding a retail sector and allowing for the upstream firms to reoptimize their input prices after the vertical merger. We show that the economic effects discussed above still arise in this extended framework, with the effects of vertical integration manifesting both at the wholesale and retail levels.\footnote{Upstream firm $U_2$ has incentives to decrease the price at which it sells to the bottler to counteract the impact of the Edgeworth-Salinger effect. We find, however, that the Edgeworth-Salinger effect still manifests itself because the effect of an eliminated double margin dominates this strategic response by $U_2$.}

Lastly, we note that the Edgeworth-Salinger effect is a form of foreclosure caused by vertical integration. In general, foreclosure incentives are classified into two categories, input foreclosure and customer foreclosure (Salop, 2018). Input foreclosure refers to situations in which an integrated firm decreases the amount of inputs sold to downstream competitors. This case does not apply to our setting as bottlers are granted exclusivity within their territories for each product they bottle (see Section 3). Customer foreclosure refers to situations in which an integrated firm decreases the amount of inputs it purchases from upstream rivals. A common form of customer foreclosure arises when the integrated firm is able to change its mix of inputs so as to favor integrated inputs, but this does not apply to our setting (i.e., each carbonated soda makes...}
use of a single concentrate). Instead, the Edgeworth-Salinger effect is a form of customer foreclosure that arises because of how vertical integration changes the marginal incentives to sell integrated versus nonintegrated products when the downstream firm controls the downstream prices of these products.\footnote{The Edgeworth-Salinger effect relates to raising rivals’ costs arguments to the extent that the quantity changes caused by vertical integration lead to an increase in the costs of rival upstream firms via economies of scale.}

3 The Carbonated-Beverage Industry

3.1 Industry

The U.S. carbonated-beverage industry was born when Coca-Cola was created in 1886.\footnote{For an in-depth presentation of the historical evolution of the industry, see Muris et al. (1993).} From its early days, the vertical structure of the industry has had two sets of players: upstream firms (or concentrate producers) and bottlers. Upstream firms such as The Coca-Cola Company (henceforth, Coca-Cola), Dr Pepper Snapple Group (henceforth, Dr Pepper SG), and PepsiCo produce and sell concentrate—the key ingredient in carbonated beverages—to a number of local franchised bottlers who produce, market, and distribute carbonated beverages.

The costs and the logistical difficulties of transporting carbonated beverages have motivated this industrial organization throughout the industry’s existence. The original bottling operations were atomized, with hundreds of local bottlers operating across the United States (Stanford, 2010a,b). Over time, bottler consolidation has taken place because of economies of scale and a decrease in transportation costs. Although more than six thousand bottling plants were operating in 1950, less than a thousand of these were left by 1990 (Saltzman et al., 1999).

In the early days of the industry, concentrate producers had difficulties monitoring local market conditions and bottler behavior. These difficulties were some of the reasons that led concentrate producers and local bottlers to sign contracts that regulated their relationships. Since then, these contracts have established that bottlers are responsible for manufacturing the final product as well as for local advertising and promotion. Bottlers have also enjoyed discretion in choosing the prices at which they sell to retailers and other establishments. Because bottling operations require dedicated investments,
bottlers were granted perpetual rights to manufacture and distribute their products in exclusive territories (Katz, 1978). 9

Although the original contracts fixed the price of concentrate—e.g., Coca-Cola fixed the price of concentrate at $1.30 per gallon in its early years (Muris et al., 1993)—new contracts written during the 20th century gave the upstream firms the right to change this price at will (see Section B in the Online Appendix). 10 Under these modern agreements, upstream firms face no obligation to participate with bottlers in the bottlers’ marketing activities, though bottlers still benefit from the upstream firms’ national marketing campaigns. 11

Throughout the history of the industry, bottlers have often transacted with more than one upstream firm (e.g., the bottler Pepsi Bottling Group transacted with both PepsiCo and Dr Pepper SG prior to 2009). This practice is allowed by upstream firms subject to two restrictions (Saltzman et al., 1999). First, a bottler cannot bottle two beverages of the same flavor from two upstream firms (e.g., a bottler producing PepsiCo’s Pepsi products cannot also produce cola-flavored products from other upstream firms). 12 Second, a bottler producing PepsiCo products cannot also produce Coca-Cola products (and vice versa).

3.2 Vertical Transactions

In 2009 and 2010, a number of vertical transactions took place in the carbonated-beverage industry involving upstream firms and bottlers. First, PepsiCo Inc. merged with Pepsi Bottling Group Inc. (PBG) and Pepsi Americas Inc. (PAS) in August of 2009. Second, Coca-Cola merged with Coca-Cola Enterprises Inc. (henceforth, CCE) in February of 2010. Lastly, PepsiCo acquired Pepsi-Cola Bottling Co. of Yuba City Inc. (PYC) in April of 2010. The Federal Trade Commission (henceforth, FTC) reviewed the transactions and cleared them in October and November of 2010 subject

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9 The use of exclusive territories in the carbonated-beverage industry is now protected by the Soft Drink Interbrand Competition Act of 1980.

10 In the 1990s, for example, a series of increases in the price of concentrate by Coca-Cola caused protests by Coca-Cola bottlers. See “Coca-Cola seeks to supersize its bottlers,” Financial Times, March 23, 2013.

11 See, for example, The Coca Cola Company (2009), PepsiAmericas, Inc. (2009), The Pepsi Bottling Group, Inc. (2009).

12 In 1963, a federal court ruled that the beverage Dr Pepper is not a “cola product.” This ruling facilitated the expansion of Dr Pepper Snapple Group products across the country, as it allowed Coca-Cola and Pepsi bottlers to also bottle Dr Pepper Snapple Group products.
to behavioral remedies related to information management and compensation (Federal Trade Commission, 2010a,b).\textsuperscript{13}

The magnitude of these transactions can be illustrated in two ways. First, Figure 1 shows the areas of the United States impacted by vertical integration. The figure shows that the integrated territories were vast, spanned all regions of the United States, and covered heterogeneous areas (e.g., urban and rural, high and low income, warm and cold). Second, the integrated bottlers accounted for about 75 percent of Coca-Cola’s and PepsiCo’s sales of bottled and canned soft drinks in 2009 (Federal Trade Commission, 2010a,b). The integrated bottlers—which bottled Dr Pepper SG brands in a subset of their territories—also accounted for 34 percent of the sales of bottled and canned soft drinks of Dr Pepper SG in 2009 (Federal Trade Commission, 2010a,b).\textsuperscript{14}

After the firms entered into their respective merger agreements, both Coca-Cola and PepsiCo acquired new exclusive licenses to continue selling and distributing Dr Pepper SG’s brands. Under these licenses, Coca-Cola retained exclusive rights to sell Dr Pepper and Canada Dry in former CCE territories, while PepsiCo retained exclusive rights to sell Dr Pepper, 7UP, A&W, Canada Dry, Crush, Sunkist, Squirt, Schweppes, and Vernors in former PBG and PAS territories.\textsuperscript{15} These licenses were acquired because the change in ownership of the bottlers triggered the termination of the original licenses. The acquisition of the new licenses suggests that it was in the best interest of the integrated firms to continue selling Dr Pepper SG brands rather than to drop them to increase Dr Pepper SG’s cost of selling them.

Lastly, industry observers argue that Coca-Cola and PepsiCo were seeking to reduce costs and gain control over retail prices with the mergers.\textsuperscript{16} Eliminating double marginalization was a way to compensate for the increase in input costs faced by the firms in the 2000s (e.g., plastic, high-fructose corn syrup). By both eliminating double margins and gaining control over downstream prices, Coca-Cola and PepsiCo could

\begin{footnotesize}
\textsuperscript{13} We provide a summary of the FTC’s complaints and decision orders of these transactions in Section C in the Online Appendix.

\textsuperscript{14} Figure 1 presents the territories in which the integrated bottlers bottled the product Dr Pepper before and after vertical integration. The bottlers also bottled other Dr Pepper SG brands, though the territories in which they did so varied across products. Similar maps can be created for each of the Dr Pepper SG brands involved in the transactions.

\textsuperscript{15} See points 17 and 24 of the FTC’s complaints regarding the Coca-Cola and PepsiCo transactions, respectively, for details (Federal Trade Commission, 2010a,b).

\end{footnotesize}
Figure 1: Cross-sectional variation in vertical integration by upstream firm

Source: Created by the authors based on Stanford (2010a,b) and the maps produced by the FTC during its investigation, using QGIS (2019) and a county-level shapefile created by the U.S. Census Bureau. Importantly, the maps depict the territories in which both the Coca-Cola and PepsiCo integrated bottlers had the right to distribute the product Dr Pepper. The FTC documents allow us to construct a different map for each Dr Pepper SG product that was part of the licensing agreements.

market their products at lower prices, giving the firms greater flexibility to counter a decline in the consumption of carbonated soft drinks.
4 Data

Our data come from three sources: territory maps of the U.S. bottling system (Stanford, 2010a,b), public documents produced by the FTC’s investigation of the PepsiCo and Coca-Cola vertical mergers, and the IRI Marketing Data Set (see Bronnenberg et al. 2008 for details).

We use the U.S. bottling-system territory maps to identify the territories of PBG, PAS, and PYC in the case of PepsiCo and CCE in the case of Coca-Cola. This information allows us to determine which areas of the country were impacted by vertical integration. We present this information for the entire United States in Figure 1 and for the counties in the IRI Marketing Data Set in Table 1. Table 1 (Panel A) shows that 357 of the 443 counties in our data were served by CCE and 397 by PBG, PAS, or PYC. That is, a majority of the counties in our sample were somehow affected by vertical integration in 2010, which is a pattern that also holds true at the national level (see Figure 1). Three hundred thirty-four counties were served both by CCE and by PBG, PAS, or PYC. Eighty-six counties were served by at most one bottler that integrated, while 23 counties were served by bottlers that did not integrate.

We complement this information with the FTC documents to identify the counties in which Dr Pepper SG brands were bottled by the integrated bottlers. Table 1 (Panel B) shows that in about 29 percent of the counties in our sample that were served by CCE, CCE also bottled and distributed at least one Dr Pepper SG brand, whereas in 80 percent of the counties served by PBG, PAS, or PYC, the PepsiCo bottler distributed at least one Dr Pepper SG brand.

We use price and sales information on the carbonated-beverage industry at the store–week–product level for the years 2007 to 2012 from the IRI Marketing Data Set. The sample includes carbonated drinks only (i.e., carbonated soda or seltzer water).\footnote{Noncarbonated substitutes, such as iced tea or energy drinks, are not included in the IRI Marketing Data Set.} We define a product as a brand–size combination (e.g., Diet Pepsi 20 oz bottle) and prices as the average price paid by consumers for each product in a store–week combination. In our analysis, we include brands with at least 0.1 percent of the market and we restrict attention to three product sizes: 20 and 67.6 oz bottles and the 144 oz box of cans.\footnote{Brands with less than 0.1 percent of the market are often local or regional brands that are sparsely available.} These sample restrictions leave us with about 49 million store–week–product...
Table 1: Summary statistics: Vertical structure

Panel A: Counties in which PBG–PAS–PYC and CCE bottled PepsiCo and Coca-Cola products, respectively

<table>
<thead>
<tr>
<th>No VI (Pepsi)</th>
<th>PBG–PAS–PYC integration</th>
<th>Total counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>No VI (Coca-Cola)</td>
<td>23</td>
<td>63</td>
</tr>
<tr>
<td>CCE integration</td>
<td>23</td>
<td>334</td>
</tr>
<tr>
<td>Total counties</td>
<td>46</td>
<td>397</td>
</tr>
</tbody>
</table>

Panel B: Counties in which PBG–PAS–PYC and CCE bottled Dr Pepper SG products

<table>
<thead>
<tr>
<th>Bottled Dr Pepper SG products</th>
<th>Total counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>253</td>
</tr>
<tr>
<td>PBG–PAS–PYC</td>
<td>81</td>
</tr>
</tbody>
</table>

Notes: An observation is a county. A county is labeled as PBG–PAS–PYC if PBG, PAS, or PYC bottled PepsiCo products in the county before vertical integration. A county is labeled as CCE if CCE bottled Coca-Cola products in the county before vertical integration.

combinations, which comprise 72 brands (216 products) and represent 88.6 percent of the industry revenues that correspond to the three product sizes we consider (or 67.2 percent of the overall revenue in this time period). Section D in the Online Appendix presents the list of products in our sample, product-level summary statistics, and an examination of the sources of price variation in our data.

With respect to measurement, we note that though our discussion has focused on the impact of vertical integration on pricing incentives at the bottler level, our price data are at the retail level. However, as we argue in Section A in the Online Appendix, the changes in incentives at the retail level mirror those at the bottler level, which makes retail prices informative about the competitive impact of vertical integration.

Summary Statistics

We next make a first approximation to measuring the effects of vertical integration using the raw data. In Table 2, we report the (unconditional) average prices of a number of 67.6 oz products, before and after vertical integration, for treated and untreated
**Table 2**: Prices and market shares across counties before and after vertical integration

<table>
<thead>
<tr>
<th>Firm</th>
<th>Variable</th>
<th>Before VI</th>
<th>After VI</th>
<th>(2)-(1)</th>
<th>Untreated</th>
<th>Treated</th>
<th>(5)-(4)</th>
<th>(6)-(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca-Cola</td>
<td>Price</td>
<td>1.379</td>
<td>1.442</td>
<td>0.064</td>
<td>1.48</td>
<td>1.544</td>
<td>0.064</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.169)</td>
<td>(0.145)</td>
<td>[0]</td>
<td>(0.135)</td>
<td>(0.153)</td>
<td>[0]</td>
<td>[0.987]</td>
</tr>
<tr>
<td>Dr Pepper SG</td>
<td>Price</td>
<td>1.343</td>
<td>1.435</td>
<td>0.092</td>
<td>1.367</td>
<td>1.508</td>
<td>0.142</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.166)</td>
<td>(0.16)</td>
<td>[0]</td>
<td>(0.179)</td>
<td>(0.172)</td>
<td>[0]</td>
<td>[0]</td>
</tr>
<tr>
<td>PepsiCo</td>
<td>Price</td>
<td>1.326</td>
<td>1.365</td>
<td>0.039</td>
<td>1.432</td>
<td>1.442</td>
<td>0.01</td>
<td>-0.029</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.13)</td>
<td>(0.133)</td>
<td>[0]</td>
<td>(0.104)</td>
<td>(0.143)</td>
<td>[0.129]</td>
<td>[0]</td>
</tr>
<tr>
<td>Coca-Cola</td>
<td>Market share</td>
<td>0.044</td>
<td>0.042</td>
<td>-0.002</td>
<td>0.043</td>
<td>0.045</td>
<td>0.002</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.031)</td>
<td>(0.026)</td>
<td>[0.147]</td>
<td>(0.024)</td>
<td>(0.029)</td>
<td>[0.143]</td>
<td>[0.039]</td>
</tr>
<tr>
<td>Dr Pepper SG</td>
<td>Market share</td>
<td>0.014</td>
<td>0.009</td>
<td>-0.005</td>
<td>0.02</td>
<td>0.01</td>
<td>-0.01</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.015)</td>
<td>(0.007)</td>
<td>[0]</td>
<td>(0.021)</td>
<td>(0.008)</td>
<td>[0]</td>
<td>[0]</td>
</tr>
<tr>
<td>PepsiCo</td>
<td>Market share</td>
<td>0.036</td>
<td>0.036</td>
<td>0</td>
<td>0.034</td>
<td>0.035</td>
<td>0.001</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.032)</td>
<td>(0.029)</td>
<td>[0.868]</td>
<td>(0.025)</td>
<td>(0.028)</td>
<td>[0.334]</td>
<td>[0.387]</td>
</tr>
</tbody>
</table>

Notes: An observation is a store–product–period combination, where period \( \in \{premerger, postmerger\} \). The table reports averages of prices and market shares (based on unit count), before and after vertical integration, for treated and untreated counties. The Coca-Cola products include 67 oz Coca-Cola and Diet Coke; the Dr Pepper SG products include 67 oz Dr Pepper and Diet Dr Pepper; the PepsiCo products include 67 oz Pepsi and Diet Pepsi. Standard deviations are in parentheses. \( p \)-values of two-sided tests for equality of means in brackets.

The table shows that the prices of PepsiCo products decreased in areas impacted by vertical integration after the vertical mergers (relative to areas not impacted by vertical integration), whereas we see no such differential change for the Coca-Cola products. The table also shows that the prices of the Dr Pepper SG products increased by 5 percent in treated counties relative to untreated ones. These price changes are consistent with joint manifestations of the efficiency and Edgeworth-Salinger effects of vertical integration.

Table 2 also shows that the market share of the Dr Pepper SG products decreased in treated counties relative to untreated counties, while the market share of the Coca-Cola products increased and the market share of the PepsiCo products did not change. The decrease in the market share of the Dr Pepper SG products is also consistent with the Edgeworth-Salinger effect of vertical integration—i.e., the integrated bottlers have incentives to increase the prices of Dr Pepper SG products to divert demand toward their own brands.

Lastly, in Table 3 we examine whether vertical integration impacted relative prices.
within a store. To do this, we rank products from lowest (1) to highest price (N) in every store–week combination, and we make before-and-after comparisons of price rankings between areas affected and unaffected by vertical integration. The exercise reveals that Dr Pepper SG products became relatively more expensive within the store in areas where these products were bottled by an integrated bottler. The table also shows that Coca-Cola products became relatively cheaper in treated counties, whereas PepsiCo products became relatively more expensive (but less so than Dr Pepper SG products). These results complement Table 2 in suggesting that vertical integration changed pricing incentives as discussed in Section 2.

### Table 3: Price rankings across counties before and after vertical integration

<table>
<thead>
<tr>
<th>Firm</th>
<th>Before VI</th>
<th>Treated</th>
<th>(2)-(1)</th>
<th>After VI</th>
<th>Treated</th>
<th>(5)-(4)</th>
<th>(6)-(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca-Cola</td>
<td>15.023</td>
<td>17.704</td>
<td>2.681</td>
<td>17.446</td>
<td>19.783</td>
<td>2.336</td>
<td>-.344</td>
</tr>
<tr>
<td></td>
<td>(6.9)</td>
<td>(6.246)</td>
<td>[0]</td>
<td>(6.132)</td>
<td>(7.601)</td>
<td>[0]</td>
<td>[0.042]</td>
</tr>
<tr>
<td>Dr Pepper SG</td>
<td>14.94</td>
<td>15.628</td>
<td>.688</td>
<td>14.102</td>
<td>17.285</td>
<td>3.183</td>
<td>2.495</td>
</tr>
<tr>
<td></td>
<td>(7.197)</td>
<td>(6.377)</td>
<td>[0]</td>
<td>(6.932)</td>
<td>(7.091)</td>
<td>[0]</td>
<td>[0]</td>
</tr>
<tr>
<td>PepsiCo</td>
<td>12.466</td>
<td>14.48</td>
<td>2.014</td>
<td>12.958</td>
<td>15.66</td>
<td>2.702</td>
<td>.688</td>
</tr>
<tr>
<td></td>
<td>(5.665)</td>
<td>(5.852)</td>
<td>[0]</td>
<td>(5.167)</td>
<td>(6.384)</td>
<td>[0]</td>
<td>[0]</td>
</tr>
</tbody>
</table>

Notes: An observation is a store–product–period combination, where period ∈ \{premerger, postmerger\}. The table reports averages of price rankings, before and after vertical integration, for treated and untreated counties. Prices are ranked from low to high, where 1 is the lowest price and N is the highest price. The analysis considers all 67 oz products in our sample. Standard deviations are in parentheses. \(p\)-values of two-sided tests for equality of means in brackets.

## 5 The Impact of Vertical Integration on Prices

How does vertical integration impact the prices of multiproduct firms? Is the Edgeworth-Salinger effect economically relevant? To answer these questions, we exploit the rich variation in vertical structure in our data and implement two complementary research designs. A strength of our analysis is that these approaches rely on different sources of variation in vertical structure and identification assumptions.

### 5.1 Differences-in-Differences Analysis

We first exploit the rich regional variation in vertical structure that resulted from the vertical mergers to implement a differences-in-differences research design. That is, we
compare within-product price changes in locations that were affected by the vertical mergers to within-product price changes in locations unaffected by the vertical mergers. In our main specification, we separately estimate

$$\log(\text{price}_{j,s,w}) = VI_{j,s,w} \beta_k + \eta_{j,s} + \phi_{j,w} + x'_{j,s,w} \delta + \epsilon_{j,s,w}$$  \hspace{1cm} (1)$$

for every $k \in \{\text{PepsiCo, Coca-Cola, Dr Pepper SG}\}$. In this specification, $VI_{j,s,w}$ is equal to one if product $j$ sold at store $s$ in week $w$ was bottled by a vertically integrated bottler, and zero otherwise. $\eta_{j,s}$ and $\phi_{j,w}$ correspond to product–store and product–week fixed effects, which allow us to control for persistent differences in local tastes and national shocks at the product level (e.g., changes in costs and advertising intensity), respectively; $x_{j,s,w}$ is a vector of product characteristics at the store–week level (e.g., advertising intensity); and $\epsilon_{j,s,w}$ is an error term clustered at the county level (i.e., the treatment unit). The coefficients of interest in Equation 1 are $\beta_{\text{Coca-Cola}}, \beta_{\text{PepsiCo}},$ and $\beta_{\text{DPSG}}$, which measure the impact of vertical integration on the prices of products bottled by an integrated bottler relative to the prices of the same product when bottled by a nonintegrated bottler.

**Identification**

The identification assumption in the differences-in-differences analysis is that the prices of products exposed to vertical integration would have followed the same trend as the prices of the same products not exposed to vertical integration had vertical integration not happened. In Figure 2 we show that the prices of products that were and were not bottled by vertically integrated bottlers were not diverging from one another prior to the vertical mergers. Below, we also find no evidence of differential pre-trends between groups when estimating a version of Equation 1 that includes leads and lags of our indicator for vertical integration (we discuss these findings below). The finding that treated and untreated products followed the same trend prior to the vertical transactions suggests that untreated products are a good control group for treated

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20 County-level demographic covariates are also included in the estimation of Equation 1, but we have omitted the county-level subindex $c$ to save on notation, as these covariates vary only at the county–year (or county–month) level. See Table D.4 in the Online Appendix for a list of these covariates.

21 In Section D in the Online Appendix we show that we cannot reject the hypothesis that the prices of products in both groups followed the same trend before the vertical mergers. We also report there the same plots for the other sizes. Because the figure for the 20 oz products suggests that the prices of the products in the treated and control groups for Dr Pepper SG may have followed differential trends before the vertical mergers, Section G.3 in the Online Appendix examines the robustness of our estimates to excluding this product category. Our findings do not change.
products, which provides support for our identification assumption.

Though selection is always a concern with differences-in-differences research designs, a number of facts render this threat unlikely in our application. First, the footprint of the integrated bottlers was large and covered locations with diverse characteristics (e.g., urban and rural, high and low income) across multiple states (see Figure 1). Second, neither Coca-Cola nor PepsiCo divested any part of the acquired territories after the vertical mergers and through the end of our sample period, which combined with the previous point suggests that they were not seeking locations with specific characteristics. Third, while there are differences in observable characteristics between areas affected and unaffected by vertical integration, these characteristics changed similarly in both types of locations during our sample period (see the covariate balance discussion in Section D in the Online Appendix). Nevertheless, we conduct a series of exercises to examine whether selection is empirically relevant (e.g., propensity-score matching), which we discuss in Section 5.3.

Results

Table 4 presents our estimates of Equation 1. The two panels reflect differences in how we define the treatment and control groups, but are otherwise identical. In Table 4 (Panel A), the treatment group includes all the product–store–week combinations directly impacted by vertical integration (i.e., a product sold by an integrated bottler in week \( t \) at store \( s \)), whereas the control group includes all product–store–week combi-
nations that were not directly impacted by vertical integration. The estimates show that vertical integration caused a 1.5 percent increase in the prices of Dr Pepper SG products bottled by vertically integrated bottlers and show no statistically significant effects of vertical integration on the prices of Coca-Cola and PepsiCo products, on average.

The increase in the prices of Dr Pepper SG products bottled by vertically integrated bottlers is consistent with a manifestation of the Edgeworth-Salinger effect. As discussed in Section 2, the elimination of double margins in Coca-Cola and PepsiCo products incentivized integrated bottlers to increase the price of Dr Pepper SG products to divert demand to integrated products. At the same time, vertical integration also created a downward pressure on the prices of integrated products (i.e., efficiency effect). However, the estimates reported in Panel A do not show price decreases in these products, which may be due to a number of factors.

First, as we argued in Section 2, if the Edgeworth-Salinger effect is large enough, the prices of integrated products may remain at their premerger level (or even increase). Second, we note that because prices are strategic complements, one integrated product is enough for all the other products sold in the same store to be indirectly impacted by vertical integration. Third, an additional layer of equilibrium feedback effects arises if more than one firm vertically integrates (i.e., the price effects for Coca-Cola products may be different if PepsiCo also integrated in that area). In what follows, we seek to insulate our estimates from these equilibrium feedback effects by modifying the treatment and the control groups.

Table 4 (Panel B) presents the differences-in-differences estimates with the restricted treatment and control groups. In Column 1 of Panel B, we define the treatment group as treated observations in areas in which only Coca-Cola vertically integrated and the Coca-Cola bottler did not bottle Dr Pepper SG products (i.e., areas in which only the efficiency effect manifests itself). We define the treatment group in Column 3 analogously. The treatment group in Column 2 restricts the sample to treated observations in areas in which either Coca-Cola or PepsiCo integrated (but not both) and the integrated bottler bottled Dr Pepper SG products. The control group is defined as observations in areas unaffected by vertical integration throughout.

\footnote{Under the premise that vertical integration caused efficiency effects, the prices of indirectly treated products likely decreased via equilibrium feedback effects. By comparing treated with indirectly treated products, our estimates of the efficiency and Edgeworth-Salinger effects of vertical integration may be biased toward and away from zero, respectively.}
Table 4: The effect of vertical integration on prices (differences-in-differences estimates)

<table>
<thead>
<tr>
<th></th>
<th>Dependent variable: log(price)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coca-Cola</td>
</tr>
<tr>
<td>Vertical integration</td>
<td></td>
</tr>
<tr>
<td>(1)</td>
<td>0.003</td>
</tr>
<tr>
<td>(0.005)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>15,756,886</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.910</td>
</tr>
</tbody>
</table>

Panel A: Baseline estimates

Panel B: Restricted treatment subsample

| Vertical integration | -0.009   | 0.012    | -0.008   |
| (0.006)              | (0.003)  | (0.005)  |
| Observations         | 1,750,697 | 2,458,215 | 1,665,107 |
| $R^2$                | 0.936     | 0.923   | 0.924    |

Notes: Standard errors clustered at the county level (443 clusters). All specifications include product-week and product-store fixed effects, as well as time-varying county-level controls and controls for feature and display. Panel A includes the full sample. Panel B drops the observations that were indirectly treated (i.e., products bottled by nonintegrated bottlers in store-week combinations where at least one product was bottled by an integrated bottler) and restricts the sample to counties that were either untreated or where only Coca-Cola integrated and the Coca-Cola bottler did not bottle Dr Pepper SG products (column 1); counties in which either Coca-Cola or PepsiCo integrated while bottling Dr Pepper SG products (column 2); and counties where only PepsiCo integrated and the PepsiCo bottler did not bottle Dr Pepper SG products (column 3).

The estimates reported in Panel B show that vertical integration caused a 1.2 percent increase in the prices of Dr Pepper SG products bottled by vertically integrated bottlers. The estimates also show that vertical integration caused a 0.9 and 0.8 percent decrease in the prices of Coca-Cola and PepsiCo products, though their p-values are 0.133 and 0.104, respectively.23 These estimates (and the direction in which they move from Panel A to Panel B) are consistent with manifestations of both the efficiency (Columns 1 and 3) and Edgeworth-Salinger effects (Column 2) of vertical integration.

Because the magnitude of the price effects may vary with the popularity of the products, we also conduct a differences-in-differences analysis using price indexes. Price in-

---

23 These results also speak to the literature studying the vertical arrangements between upstream and downstream firms (see, for example, Villas-Boas 2007 and Bonnet and Dubois 2010). Our findings provide indirect evidence of the existence of a linear component in the price of concentrate (see discussion in Section 2).
Table 5: The effect of vertical integration on price indexes (differences-in-differences estimates)

<table>
<thead>
<tr>
<th>Dependent variable: log(price index)</th>
<th>All products (1)</th>
<th>Coca-Cola (2)</th>
<th>Dr Pepper SG (3)</th>
<th>PepsiCo (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical integration</td>
<td>-0.001</td>
<td>-0.006</td>
<td>0.048</td>
<td>-0.022</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.007)</td>
<td>(0.008)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Observations</td>
<td>528,838</td>
<td>528,491</td>
<td>526,527</td>
<td>524,762</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.809</td>
<td>0.860</td>
<td>0.867</td>
<td>0.878</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (431 clusters). An observation is a store–week combination. Price indexes are computed based on pre-vertical-integration average quantities at the store–product level, where the weight of each product in a given store–week combination is its average quantity in that store in the pre-merger period. The price index in column 1 includes all products, whereas the price indexes in columns 2 to 4 restrict the set of products to Coca-Cola, Dr Pepper SG, and PepsiCo products, respectively. All specifications include store and week fixed effects, as well as time-varying county-level controls.

dexes allow us to summarize potentially heterogeneous price effects by putting greater weight on the price effects of more popular products. We compute the price indexes at the store–week level and define these as weighted-average prices. The weights are given by the average weekly quantities of each product–store combination before the transactions.\(^\text{24}\)

Table 5 (Column 1) shows that vertical integration did not have a significant effect on the price index when considering the full set of products. However, the table shows that vertical integration caused an increase in the price index of Dr Pepper SG products (4.8 percent) and a decrease in the price indexes of Coca-Cola and PepsiCo (0.6 and 2.2 percent, respectively, though the effect is only significant for PepsiCo products).\(^\text{25}\)

These results provide additional evidence of manifestations of both the Edgeworth-Salinger and the efficiency effects of vertical integration.

Finally, we estimate a version of Equation 1 to examine both when the changes in...

\(^{24}\)See Section F.1 in the Online Appendix for more details. There, we also show that our results are robust to using weights that are defined as the national average weekly quantities of each product before the transactions. We report estimates using both types of weights because the store level weights have the benefit of better reflecting the choices of consumers in each store, whereas the national-level weights have the benefit of being uncorrelated with the mergers.

\(^{25}\)We note that the magnitudes of the effects of vertical integration on Dr Pepper SG and PepsiCo price indexes are larger (in absolute value) than those reported in Table 4. This is consistent with evidence presented in Section 6 showing that vertical integration caused heterogeneous effects across products, with more popular products exhibiting relatively large effects (in absolute value).
the prices of products bottled by vertically integrated bottlers occurred and whether there were differential trends before the vertical mergers. Figure 3 (Panel A) presents estimates for both Coca-Cola and PepsiCo products and suggests no statistical evidence of pre-vertical-merger differential trends specific to products eventually sold by a vertically integrated bottler. Panel A also shows that while prices of Coca-Cola and PepsiCo products did not immediately change, they did decrease by between 1 to 2 percent after seven quarters. On the other hand, Panel B shows immediate and lasting price effects in Dr Pepper SG products following vertical integration, which is consistent with the Edgeworth-Salinger effect. In line with Table 4, the figure suggests price increases of 1 to 2 percent on average. The figure also shows no evidence of differential trends before the vertical mergers.

5.2 Within-Store Analysis

Our second analysis examines how the prices of products sold in the same store changed after vertical integration as a consequence of a subset of them becoming integrated.

26 These price decreases could be evidence of long-run efficiencies caused by the vertical mergers. However, we note that because of the timing of the price decreases, these could have been caused by factors unrelated to the elimination of double marginalization.
From the perspective of the discussion in Section 2, this amounts to comparing the prices faced by the customers of a particular store in the equilibria with and without vertical integration. The theory predicts that the efficiency and Edgeworth-Salinger effects should have made brands owned by an integrated bottler cheaper and Dr Pepper SG brands bottled by an integrated bottler more expensive relative to nonintegrated products (see Table 3 for motivating evidence).

We implement this analysis by pooling the products of all upstream firms and modifying Equation 1 to include store–week fixed effects, which capture store–week price levels. That is, we estimate

$$\log(\text{price}_{j,s,w}) = V I_{j,s,w}^{CC/Pepsi} \beta^{CC/Pepsi} + V I_{j,s,w}^{Dr P} \beta^{Dr P} + \eta_{j,s} + \phi_{j,w} + \gamma_{s,w} + x_{j,s,w}' \delta + \varepsilon_{j,s,w},$$

where $V I_{j,s,w}^{CC/Pepsi}$ equals one if product $j$ sold at store $s$ in week $w$ was a Coca-Cola or PepsiCo product bottled by a vertically integrated bottler, and zero otherwise; $V I_{j,s,w}^{Dr P}$ is defined similarly but for Dr Pepper SG products; $\gamma_{s,w}$ are store-level time effects; $\eta_{j,s}$, $\phi_{j,w}$, and $x_{j,s,w}$ are defined as in Equation 1; and $\varepsilon_{j,s,w}$ is an error term clustered at the county level.

In Equation 2, the coefficient $\beta^{CC/Pepsi}$ measures the effect of vertical integration on the prices of products owned by an integrated bottler relative to the prices of products bottled by nonintegrated bottlers (i.e., the omitted category). Similarly, $\beta^{Dr P}$ measures the impact of vertical integration on the prices of Dr Pepper SG products bottled by an integrated bottler relative to the prices of products bottled by nonintegrated bottlers. We note that because we compare prices within a store, and equilibrium prices are interdependent, $\beta^{CC/Pepsi}$ and $\beta^{Dr P}$ measure the impact of vertical integration on integrated and Dr Pepper SG brands net of equilibrium feedback effects.27

The identification assumption in this analysis is that the prices of products directly impacted by vertical integration would have remained constant relative to the prices of products bottled by nonintegrated bottlers that were sold in the same store, absent vertical integration. Our identification strategy leverages within-store variation in vertical structure (i.e., some products became integrated and some did not) and that every store has products that remained nonintegrated throughout.

27 We note that the untreated observations (i.e., those in store–week combinations in which no product was treated) contribute to the identification of common trends, but not to the identification of the effects of vertical integration on prices.
Table 6 reports the estimates associated with this analysis. Consistent with the theory, Column 1 shows that vertical integration caused a 1.2 percent decrease in the prices of own brands (e.g., Coca-Cola or Pepsi) and a 1.5 percent increase in the prices of Dr Pepper SG bottled by a vertically integrated bottler relative to the prices of products bottled by nonintegrated bottlers. In Column 2 we allow the price effects to vary both by brand type (i.e., own or Dr Pepper SG brands) and by upstream company (i.e., Coca-Cola or PepsiCo). The results suggest that vertical integration decreased the prices of Coca-Cola and PepsiCo products bottled by vertically integrated bottlers by an average of 1.1 and 1.2 percent, respectively, relative to products bottled by nonintegrated bottlers. The average increase in the prices of Dr Pepper SG products bottled by a vertically integrated Coca-Cola and PepsiCo bottler relative to the prices of products bottled by nonintegrated bottlers is estimated to be 2.2 and 0.7 percent, respectively.\(^\text{28}\)

Lastly, we discuss the connection between the differences-in-differences and the within-store estimators in Section E in the Online Appendix. We argue that both estimators would deliver the same point estimates if the prices of nonintegrated products in markets affected and unaffected by vertical integration had followed the same trends. This condition would fail to hold, for example, if vertical integration caused price changes in nonintegrated products in markets affected by vertical integration (e.g., via equilibrium feedback effects). To gauge this connection, we compare the estimates associated with both research designs using the sample considered in Table 4 (Panel B), which is designed to minimize the role of equilibrium feedback effects. As predicted, the analysis in Section E in the Online Appendix shows that the estimates are nearly identical in the absence of equilibrium feedback effects. The similarity between the estimates is a strength of our paper, as both research designs rely on different sources of variation and identification assumptions.

### 5.3 Robustness

In this section, we briefly describe a number of exercises meant to address econometric concerns and to explore the sensitivity of our estimates to alternative specifications and subsamples.

\(^{28}\)We cannot reject that the coefficients measuring the effect of vertical integration on own brands are equal across firms (\(p = 0.93\)). We do, however, reject the hypothesis that the coefficients measuring the effect of vertical integration on Dr Pepper SG brands are the same across firms (\(p = 0.01\)).
### Table 6: The effect of vertical integration on prices (within-store estimates)

<table>
<thead>
<tr>
<th></th>
<th>Dependent variable: log(price)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>-0.012</td>
</tr>
<tr>
<td>× Coca-Cola/PepsiCo product</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>0.015</td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Vertical integration (Coca-Cola)</td>
<td>-0.011</td>
</tr>
<tr>
<td>× Coca-Cola product</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Vertical integration (Coca-Cola)</td>
<td>0.022</td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Vertical integration (PepsiCo)</td>
<td>0.007</td>
</tr>
<tr>
<td>× PepsiCo product</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Vertical integration (PepsiCo)</td>
<td>0.007</td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.003)</td>
</tr>
<tr>
<td>Observations</td>
<td>48,743,027</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.911</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (443 clusters). All specifications include store–week, product–week, and product–store fixed effects, as well as controls for feature and display.

We first empirically evaluate whether selection on observables impacts our estimates. This is motivated by the differences in demographics between treated and untreated counties reported in Section D.4 in the Online Appendix. To do this, we replicate our differences-in-differences analysis using a blocking-regression approach based on propensity-score matching. In addition, we repeat our analysis restricting the sample to neighboring counties that were differentially impacted by vertical integration. Both of these exercises allow us to to compare price changes in counties that are similar except for having been differentially impacted by vertical integration. The estimates that we obtain across these exercises are similar to those reported in Table 4, which suggests that selection is empirically irrelevant (Section F.2 in the Online Appendix).

Second, we also explore the robustness of our results to different levels of aggregation for three reasons (Section F.3 in the Online Appendix). First, retail chains set similar prices across their stores (e.g., see DellaVigna and Gentzkow, 2019), which suggests that there may be spillover effects when two nearby counties are differentially exposed
to vertical integration. Second, it is possible that the frequency with which retailers change prices varies across products, which could lead to prices of some products reacting to vertical integration faster than the prices of other products. Third, the serial correlation of prices may lead to inconsistent estimates of standard errors (see Bertrand et al., 2004). Throughout these aggregation exercises, which include aggregations at the temporal, geographical, and chain level, we find that the estimates of the Edgeworth-Salinger effect retain the sign and statistical significance in all cases and remain within one standard error of the estimate reported in Table 4 (Panel B) in all but one case.

Third, with respect to inference, we conduct a series of placebo exercises both in sample and in other product categories sold in the same store as the integrated products, to compute the likelihood of our estimates under the hypothesis of a null effect (Section F.4 in the Online Appendix). Across all these exercises, our estimated p-values range between 0.006 and 0.054. We also show that our estimates retain their level of statistical significance when clustering standard errors at the MSA rather than county level (Section F.5 in the Online Appendix).

In Section G in the Online Appendix, we conduct a series of exercises to study the sensitivity of our estimates to different subsamples and specifications. We first examine whether vertical integration had a differential impact on the subsamples of regular and sale prices because of the prevalence of price promotions in the carbonated soda product category (Section G.1). We find that our estimates of the Edgeworth-Salinger effect do not vary across samples (with estimated price increases of 1.3 and 1.5 percent for regular and sales prices, respectively) and that the regular prices of PepsiCo products decreased by more than the sales prices as a consequence of vertical integration.

Lastly, we acknowledge that larger retailers may have had access to rebates offered by upstream producers that may have counteracted the price effects of vertical integration (e.g., Dr Pepper SG may have attempted to counteract the Edgeworth-Salinger effect by offering rebates to large retailers). We study this possibility by examining whether the price effects of vertical integration varied across types of stores (e.g., national versus local chains, large versus small chains). We find that although the estimate of the Edgeworth-Salinger effect is positive and significant for all types of stores, the effect is larger for small and local chains (Section G.2).
6 The Impact of Vertical Integration on Revenues

We next examine the impact of vertical integration on the revenues of the upstream firms. To do this, we propose a framework that allows us to map our differences-in-differences research design to changes in revenues for Coca-Cola, Dr Pepper SG, and PepsiCo products.

Let \( q^f_{0j} \) and \( p^f_{0j} \) be the quantity and price of product \( j \), sold by firm \( f \), before vertical integration. Similarly, let \( q^f_{1j} \) and \( p^f_{1j} \) be the quantity and price of product \( j \) after vertical integration. We can write post-vertical-integration outcomes as

\[
p^f_{1j} = p^f_{0j}(1 + \Delta p_j) \quad \text{and} \quad q^f_{1j} = q^f_{0j}(1 + \Delta q_j),
\]

where \( \Delta x \) represents the percentage change in \( x \) caused by vertical integration. The revenues of firm \( f \) before vertical integration are

\[
R^f_0 = \sum_{j \in J_f} p^f_{0j}q^f_{0j},
\]

where \( J_f \) is the set of products of firm \( f \). Similarly, revenues after vertical integration are given by

\[
R^f_1 = \sum_{j \in J_f} p^f_{0j}(1 + \Delta p_j)q^f_{0j}(1 + \Delta q_j).
\]

The impact of vertical integration on the revenue of upstream firm \( f \) (in percentage terms) is thus

\[
\Delta R^f = \sum_{j \in J_f} s^f_{0j}(\Delta q_j + \Delta p_j + \Delta q_j \Delta p_j),
\]

where \( s^f_{0j} = p^f_{0j}q^f_{0j}/\left(\sum_{k \in J_f} p^f_{0k}q^f_{0k}\right) \) corresponds to the pre-integration revenue share of product \( j \) among the products sold by firm \( f \).

An empirical implementation of Equation 3 requires estimates of the price and quantity effects of vertical integration for every product \( j \) (i.e., \( \Delta q_j \) and \( \Delta p_j \)). We estimate these price and quantity effects, product by product, using our differences-in-differences framework.\(^{29}\) We report the distribution of the estimates of \( \Delta q_j \) and \( \Delta p_j \) in Figure 4. The figure shows that vertical integration caused an increase in price and a decrease in quantity in most Dr Pepper SG products. The figure also presents mixed evidence for Coca-Cola and PepsiCo products.

With the estimates for \( \Delta q_j \) and \( \Delta p_j \) in hand, we use Equation 3 to compute the effects of vertical integration on the revenue of each upstream firm. This analysis suggests that vertical integration caused a 1.3 percent decrease in the revenue of Dr Pepper SG

\(^{29}\)Specifically, we estimate \( \log(\text{outcome}_{j,s,w}) = VI_{j,s,w} \beta^f_{VI} + \lambda_{j,s} + \phi_{j,w} + x^f_{j,s,w} \delta + \varepsilon_{j,s,w} \) for every product \( j \) that was somewhere impacted by vertical integration, where \( \text{outcome}_{j,s,w} \in \{\text{price}_{j,s,w}, \text{quantity}_{j,s,w}\} \), the indicator \( VI_{j,s,w} \) takes the value one if product \( j \) at store \( s \) was bottled by a vertically integrated bottler at week \( w \), and \( \lambda_{j,s} \) and \( \phi_{j,w} \) are product–store and product–week fixed effects, respectively. The vector \( x^f_{j,s,w} \) includes product characteristics at the store–week level (e.g., advertising intensity), and \( \varepsilon_{j,s,w} \) is an error term clustered at the county level.
Figure 4: Empirical CDF of estimated product-level coefficients on vertical integration: OLS regressions

Notes: The figure reports the empirical CDF of the estimated coefficients on vertical integration on prices and quantities for Coca-Cola, PepsiCo, and Dr Pepper SG brands. The underlying regressions are at the product level and include store and week fixed effects, as well as controls for price promotions and county-level demographics. The treatment and control groups are defined as in Table 4 (Panel B).

products and an increase in the revenues of Coca-Cola and PepsiCo products of 1.7 and 2.2 percent, respectively, relative to the revenues in areas unaffected by vertical integration. These estimates show that while Coca-Cola and PepsiCo benefited from vertical integration, Dr Pepper SG suffered from it.

7 Discussion and Policy Implications

The debate on antitrust enforcement of vertical mergers has intensified in recent years amid a wave of large vertical transactions (see Federal Trade Commission 2018 for background on the debate, and Footnote 1 for a list of recent cases). We contribute to this debate by providing new evidence of the anticompetitive effects of vertical mergers in the context of multiproduct firms.

We consider a mechanism that arises when vertical integration eliminates the double margins in only a subset of the products sold by a downstream firm. The products with eliminated double margins become relatively more profitable to sell, which gives the multiproduct firm incentives to divert demand toward these products by increasing the prices of the products for which double margins were not eliminated. These price
increases are anticompetitive because of how they harm the producer of the nonintegrated products.

We examine the relevance of this mechanism in the context of the U.S. carbonated-beverage industry by exploiting a recent wave of vertical mergers between upstream concentrate producers and downstream bottlers, which generated rich variation in vertical structure across time and space. Using this variation, we implement two complementary research designs to identify both the pro and anticompetitive effects of vertical integration. Our analysis shows that vertical integration in the U.S. carbonated-beverage industry caused anticompetitive price increases in products for which double margins were not eliminated.

Our research suggests that the impact of vertical integration on multiproduct pricing incentives is relevant for future vertical-merger enforcement actions for at least two reasons. First, the relative magnitude of our estimates of the anticompetitive and efficiency effects of vertical integration suggest that the elimination of double marginalization cannot be presumed to be procompetitive in the context of vertical integration by multiproduct firms. Second, because the pricing incentives that we study were present in many vertical transactions that have taken place in the last decades, our work suggests that the Edgeworth-Salinger effect should be incorporated in the evaluation of future vertical-merger enforcement actions. To this end, we note that economic tools used for horizontal-merger analysis, such as merger simulation and the estimation of own- and cross-price elasticities, could also be used to predict the magnitude of the Edgeworth-Salinger effect of vertical integration.

References


The Competitive Impact of Vertical Integration by Multiproduct Firms

Fernando Luco and Guillermo Marshall
A Model

Consider a market with $N_U$ upstream firms, $N_B$ bottlers, and a retailer. There are $J$ inputs produced by the $N_U$ upstream firms and $J$ final products produced by the $N_B$ bottlers. Each final product makes use of one (and only one) input product. All $J$ final products are sold by the retailer. The set of products produced by each upstream firm $i$ and bottler $j$ are given by $J^i_U$ and $J^j_B$, respectively. In what follows, we restrict to the case in which the sets in both $\{J^j_B\}_{j \in N_B}$ and $\{J^i_U\}_{i \in N_U}$ are disjoint (i.e., Diet Dr Pepper cannot be produced by two separate bottlers or upstream firms). We allow for a bottler to transact with multiple upstream firms (e.g., a PepsiCo bottler selling products based on PepsiCo and Dr Pepper SG concentrates).

The model assumes that linear prices are used along the vertical chain. That is, linear prices are used both by upstream firms selling their inputs to bottlers and by bottlers selling their final products to the retailer. The price of input product $j$ set by an upstream firm is given by $c_j$; the price of final good $k$ set by a bottler is $w_k$; and the retail price of product $j$ is $p_j$. We assume that the input cost of upstream firms is zero, and the marginal costs of all other firms equals their input prices. The market share of product $j$, given a vector of retail prices $p$, is given by $s_j(p)$.

We describe the pricing problem of each type of firm in reverse order. With respect to the retail sector, we assume that the retailer sets its prices taking as given the vector of wholesale prices set by the bottlers, $w$. We follow Miller and Weinberg (2017) in assuming that the retail prices are determined by

$$0 = \lambda s_j + \sum_{k \in J} \frac{\partial s_k(p)}{\partial p_j} (p_k - w_k) \quad (A.1)$$

for every $j \in J$ and where $\lambda \in [0, 1]$. This equation is the first-order condition of a multiproduct monopolist except for the presence of the retail scaling parameter $\lambda$. The parameter $\lambda$ scales the retail markups between zero ($\lambda = 0$) and the monopoly markups ($\lambda = 1$), and allows us to capture the competitive pressure faced by the retailer in a simple way.

Every bottler $i$ chooses a wholesale price $w_j$ for each product $j \in J^i_B$, where $J^i_B$ corresponds to the set of products sold by bottler $i$. We assume that the bottlers choose their wholesale prices taking as given the vector of input prices set by the upstream firms, $c$. When solving their problems, the bottlers use backward induction and take
into consideration how their wholesale prices will affect the equilibrium retail prices, $p(w)$. Bottler $i$ then solves

$$\max_{\{w_j\}_j \in J_B^i} \sum_{j \in J_B^i} (w_j - c_j) s_j(p(w)),$$

(A.2)

where $J_B^i$ corresponds to the set of products sold by bottler $i$. The first-order necessary condition for product $j$ sold by bottler $i$ is given by

$$0 = s_j(p(w)) + \sum_{k \in J_B^i} \sum_{h \in J} \frac{\partial s_k(p(w))}{\partial p_h} \frac{\partial p_h(w)}{\partial w_j} (p_k - w_k).$$

Lastly, every upstream firm $i$ chooses the input price $c_j$ for each of their products $j \in J_U^i$. The upstream firms take into consideration how their input prices will impact both the wholesale prices set by the bottlers, $w(c)$, and the retail prices set by the retailer, $p(w)$, via the effect of input prices on wholesale prices. Upstream firm $i$ solves

$$\max_{\{c_j\}_j \in J_U^i} \sum_{j \in J_U^i} c_j s_j(p(w(c))),$$

where $J_U^i$ corresponds to the set of products sold by upstream firm $i$. The first-order necessary condition for product $j$ sold by upstream firm $i$ is given by

$$0 = s_j(p(w(c))) + \sum_{k \in J_U^i} \sum_{h \in J} \sum_{l \in J} \frac{\partial s_k(p(w(c)))}{\partial p_h} \frac{\partial p_h(w)}{\partial w_l} \frac{\partial w_l}{\partial c_j} c_k,$$

(A.3)

for every $j \in J_U^i$.

Equilibrium strategies are given by the correspondences $p(w)$, $\{w_i(c)\}_{i \in N_B}$, and $\{c_i\}_{i \in N_U}$ that simultaneously solve equations (A.1) - (A.3).

**Example**

We consider a set of numerical examples. We assume the existence of two products $J = 2$, where the demand for product $j$ is given by

$$s_j(p) = \frac{\exp\{ap_j\}}{\exp\{\delta\} + \sum_{k \in J} \exp\{ap_k\}}.$$
Table A.1: Numerical examples: Equilibrium prices

Example 1: $a = -1.5$, $\delta = -2$, $\lambda = 0.2$

<table>
<thead>
<tr>
<th>Upstream</th>
<th>Bottler</th>
<th>Retailer</th>
</tr>
</thead>
<tbody>
<tr>
<td>No VI</td>
<td>VI</td>
<td>No VI</td>
</tr>
<tr>
<td>Product 1</td>
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</tr>
<tr>
<td>Product 2</td>
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<td>0.8734</td>
</tr>
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</table>

Example 2: $a = -1.6$, $\delta = -1.9$, $\lambda = 0.1$

<table>
<thead>
<tr>
<th>Upstream</th>
<th>Bottler</th>
<th>Retailer</th>
</tr>
</thead>
<tbody>
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<td>No VI</td>
<td>VI</td>
<td>No VI</td>
</tr>
<tr>
<td>Product 1</td>
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<td>1.9412</td>
</tr>
<tr>
<td>Product 2</td>
<td>0.9458</td>
<td>0.8229</td>
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Example 3: $a = -1.25$, $\delta = -1.75$, $\lambda = 0.1$

<table>
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<tr>
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<th>Bottler</th>
<th>Retailer</th>
</tr>
</thead>
<tbody>
<tr>
<td>No VI</td>
<td>VI</td>
<td>No VI</td>
</tr>
<tr>
<td>Product 1</td>
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<td>2.4004</td>
</tr>
<tr>
<td>Product 2</td>
<td>1.1468</td>
<td>1.0379</td>
</tr>
</tbody>
</table>

with $a < 0$ and $\delta \in \mathbb{R}$.\footnote{We use values of $\lambda$ that are similar to the ones used in Miller and Weinberg (2017).}

We assume the existence of a single bottler producing both final products, and the existence of two upstream firms selling a single input product each.

In these examples, we compare the equilibria without vertical integration (as described in the previous section) with the equilibrium with vertical integration. In the case of vertical integration, we consider the case in which one of the upstream firms vertically integrates with the bottler. The only difference in this case is that with vertical integration, the integrated upstream firm transfers the input product to the bottler at marginal cost (i.e., zero). These examples allow us to quantify the impact of vertical integration on prices in equilibrium.

The examples in Table A.1 show a manifestation of both the efficiency and Edgeworth-Salinger effects of vertical integration, with an increase in the equilibrium price of product 2 at both the bottler and retail level. The increase in the price of product 2 at the bottler level is motivated by the eliminated double margin in product 1. That is, product 1 becomes relatively more profitable to sell for the bottler, incentivizing the bottler to increase the price of product 2 to divert demand toward product 1. Similarly, the effect at the retailer level is caused by the changes in the wholesale prices faced by
the retailer (i.e., the bottler sells product 1 for less after vertical integration). These increases in the price of product 2 arise despite a decrease in the concentrate price of product 2.
Contracts between bottlers and concentrate producers

Contracts between bottlers and upstream firms are proprietary data. However, some of these contracts are stored in online repositories. In addition, the financial information of publicly traded bottlers and concentrate producers is publicly available. In this section, we provide links to documents we have had access to during the preparation of this paper. These documents allow us to argue that:

1. Upstream firms have the right to change the price of concentrate at their sole discretion. An example of this is provided by historical events. In the 1990s, Coca-Cola bottlers protested against increases in the price of concentrate, as the price-cost margin of bottlers was decreasing.

2. Bottlers have the right to choose the price at which they sell to their customers, with two exceptions: i) in some cases, upstream firms have the right to establish a price ceiling, and ii) upstream firms may suggest prices to the bottlers.

3. Our review of these documents suggests that concentrate prices had a linear component at least until the end of our sample period. The only evidence of lump-sum transfers between bottlers and upstream firms is from a contract from 2018 that covers a sub-bottling agreement in a sub-territory. Two additional

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33See https://caselaw.findlaw.com/us-10th-circuit/1206491.html (2005, paragraph 7), and https://www.sec.gov/Archives/edgar/data/317540/000095014408001899/g12161ke10vk.htm (2008, page 3). Also, contracts with other beverage companies have a similar structure. See the previous link, page 5.

pieces of evidence are consistent with our reading of the documents. First, our results are a test for the existence of double marginalization, and these results suggest the existence of double margins. Second, industry publications report concentrate prices as prices per 288 oz case, suggesting a linear component to prices as well.\textsuperscript{35}

From our examination of these documents, we conclude that while the original prices charged by the upstream firms were linear prices (Muris et al., 1993), there has been a recent movement toward incorporating nonlinearities in the terms of the contracts. However, our examination of the documents does not allow us to rule out the existence of a linear component in the price paid by the bottlers, at least until 2018.\textsuperscript{36}

\textsuperscript{35}See, for example, \textit{Beverage Digest} Volume 54, No. 11 (May 15, 2009).

C FTC complaints and decision orders

The FTC reviewed the transactions in 2010 and cleared them in October and November of that year subject to some behavioral remedies. The FTC’s main concerns were related to Coca-Cola and PepsiCo having access to confidential information provided by Dr Pepper SG to vertically integrated bottlers. In particular, the FTC argued that the agreements between Coca-Cola/PepsiCo and Dr Pepper SG could lessen competition because, first, they could eliminate competition between Coca-Cola/PepsiCo and Dr Pepper SG; second, they could increase the likelihood of unilateral exercise of market power by Coca-Cola and PepsiCo; and third, they could facilitate coordinated interaction. That is, the concerns raised by the FTC were based on potential violations of Section 5 of the FTC Act and Section 7 of the Clayton Act. The FTC did not raise arguments related to the Edgeworth-Salinger effect in its complaints.

The remedies imposed by the FTC included, among others, that Coca-Cola/PepsiCo employees who would have access to confidential information had to be “firewalled,” could only participate in the bottling process, and could not receive bonuses or benefits incentivizing them to increase the sales of own brands relative to Dr Pepper SG brands.

The material related to the FTC’s investigations can be accessed at

- https://www.ftc.gov/enforcement/cases-proceedings/091-0133/pepsico-inc-matter,
  and
D Additional summary statistics

In this Appendix, we provide additional summary statistics and information regarding the extent of vertical integration in the U.S. carbonated beverage industry.

D.1 Summary statistics

<table>
<thead>
<tr>
<th>Brand</th>
<th>Firm</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
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<td>0.24</td>
<td>420559</td>
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<td>32133</td>
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</table>

Notes: An observation is a brand–size–store–week combination.
<table>
<thead>
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<th>Brand</th>
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<th></th>
<th>%d.</th>
<th>67.6 oz</th>
<th></th>
<th>%d.</th>
<th>144 oz</th>
<th></th>
<th>%d.</th>
</tr>
</thead>
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<td>77604</td>
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<tr>
<td>Mountain Dew Throwback</td>
<td>Pepsi</td>
<td>69940</td>
<td>1.41</td>
<td>0.28</td>
<td>25963</td>
<td>1.44</td>
<td>0.30</td>
<td>112274</td>
<td>4.08</td>
<td>1.02</td>
</tr>
<tr>
<td>Mountain Dew Voltage</td>
<td>Pepsi</td>
<td>94610</td>
<td>1.45</td>
<td>0.24</td>
<td>160664</td>
<td>1.4</td>
<td>0.29</td>
<td>181766</td>
<td>4.06</td>
<td>1.01</td>
</tr>
<tr>
<td>Mug</td>
<td>Pepsi</td>
<td>41320</td>
<td>1.54</td>
<td>0.38</td>
<td>357551</td>
<td>1.38</td>
<td>0.29</td>
<td>354697</td>
<td>3.99</td>
<td>0.99</td>
</tr>
<tr>
<td>Pepsi</td>
<td>Pepsi</td>
<td>531774</td>
<td>1.5</td>
<td>0.17</td>
<td>528315</td>
<td>1.41</td>
<td>0.30</td>
<td>518629</td>
<td>3.9</td>
<td>0.87</td>
</tr>
<tr>
<td>Pepsi Max</td>
<td>Pepsi</td>
<td>311016</td>
<td>1.49</td>
<td>0.21</td>
<td>342304</td>
<td>1.39</td>
<td>0.31</td>
<td>327517</td>
<td>3.93</td>
<td>0.99</td>
</tr>
<tr>
<td>Pepsi Next</td>
<td>Pepsi</td>
<td>35781</td>
<td>1.5</td>
<td>0.27</td>
<td>53334</td>
<td>1.29</td>
<td>0.34</td>
<td>47463</td>
<td>3.85</td>
<td>1.03</td>
</tr>
<tr>
<td>Pepsi One</td>
<td>Pepsi</td>
<td>2564</td>
<td>1.35</td>
<td>0.12</td>
<td>208701</td>
<td>1.35</td>
<td>0.29</td>
<td>314400</td>
<td>3.92</td>
<td>0.99</td>
</tr>
<tr>
<td>Pepsi Throwback</td>
<td>Pepsi</td>
<td>83036</td>
<td>1.43</td>
<td>0.27</td>
<td>23590</td>
<td>1.47</td>
<td>0.29</td>
<td>141714</td>
<td>4.09</td>
<td>1.01</td>
</tr>
<tr>
<td>Pibb Xtra</td>
<td>Coke</td>
<td>25866</td>
<td>1.43</td>
<td>0.18</td>
<td>48456</td>
<td>1.34</td>
<td>0.27</td>
<td>125295</td>
<td>3.96</td>
<td>0.89</td>
</tr>
<tr>
<td>RC</td>
<td>Dr Pepper</td>
<td>43099</td>
<td>1.2</td>
<td>0.38</td>
<td>244893</td>
<td>1.26</td>
<td>0.28</td>
<td>209290</td>
<td>3.84</td>
<td>0.83</td>
</tr>
<tr>
<td>Schweppes</td>
<td>Dr Pepper</td>
<td>53970</td>
<td>1.54</td>
<td>0.19</td>
<td>339935</td>
<td>1.4</td>
<td>0.31</td>
<td>272106</td>
<td>4.08</td>
<td>0.95</td>
</tr>
<tr>
<td>Seagram's</td>
<td>Coke</td>
<td>19573</td>
<td>4.46</td>
<td>3.63</td>
<td>265112</td>
<td>1.44</td>
<td>0.31</td>
<td>216035</td>
<td>4.19</td>
<td>1.01</td>
</tr>
<tr>
<td>Sierra Mist</td>
<td>Pepsi</td>
<td>255442</td>
<td>1.42</td>
<td>0.16</td>
<td>295841</td>
<td>1.34</td>
<td>0.29</td>
<td>275171</td>
<td>3.74</td>
<td>0.90</td>
</tr>
<tr>
<td>Sierra Mist Cranberry Splash</td>
<td>Pepsi</td>
<td>55905</td>
<td>1.39</td>
<td>0.26</td>
<td>102663</td>
<td>1.36</td>
<td>0.31</td>
<td>74311</td>
<td>4.02</td>
<td>0.95</td>
</tr>
<tr>
<td>Sierra Mist Free</td>
<td>Pepsi</td>
<td>73193</td>
<td>1.42</td>
<td>0.16</td>
<td>67050</td>
<td>1.25</td>
<td>0.25</td>
<td>103503</td>
<td>3.58</td>
<td>0.8</td>
</tr>
<tr>
<td>Sierra Mist Natural</td>
<td>Pepsi</td>
<td>140485</td>
<td>1.52</td>
<td>0.24</td>
<td>173222</td>
<td>1.41</td>
<td>0.33</td>
<td>153299</td>
<td>4.05</td>
<td>1.02</td>
</tr>
<tr>
<td>Sprite</td>
<td>Coke</td>
<td>525923</td>
<td>1.51</td>
<td>0.15</td>
<td>432152</td>
<td>1.5</td>
<td>0.30</td>
<td>408676</td>
<td>4.09</td>
<td>0.93</td>
</tr>
<tr>
<td>Sprite Zero</td>
<td>Coke</td>
<td>189673</td>
<td>1.5</td>
<td>0.16</td>
<td>440937</td>
<td>1.45</td>
<td>0.29</td>
<td>435877</td>
<td>4.1</td>
<td>0.95</td>
</tr>
<tr>
<td>Squirt</td>
<td>Dr Pepper</td>
<td>137354</td>
<td>1.42</td>
<td>0.27</td>
<td>273682</td>
<td>1.37</td>
<td>0.31</td>
<td>235088</td>
<td>3.98</td>
<td>0.91</td>
</tr>
<tr>
<td>Sun Drop</td>
<td>Dr Pepper</td>
<td>53992</td>
<td>1.4</td>
<td>0.28</td>
<td>118015</td>
<td>1.27</td>
<td>0.31</td>
<td>95340</td>
<td>4.05</td>
<td>0.96</td>
</tr>
<tr>
<td>Sunkist</td>
<td>Dr Pepper</td>
<td>352410</td>
<td>1.46</td>
<td>0.35</td>
<td>476905</td>
<td>1.36</td>
<td>0.32</td>
<td>425571</td>
<td>4.01</td>
<td>0.94</td>
</tr>
<tr>
<td>Vanilla Coke</td>
<td>Coke</td>
<td>54182</td>
<td>1.42</td>
<td>0.18</td>
<td>17827</td>
<td>1.3</td>
<td>0.25</td>
<td>240326</td>
<td>4.1</td>
<td>0.97</td>
</tr>
<tr>
<td>Vault</td>
<td>Coke</td>
<td>98225</td>
<td>1.34</td>
<td>0.21</td>
<td>66704</td>
<td>1.28</td>
<td>0.26</td>
<td>148527</td>
<td>3.87</td>
<td>0.86</td>
</tr>
<tr>
<td>Vernors</td>
<td>Dr Pepper</td>
<td>19129</td>
<td>1.43</td>
<td>0.28</td>
<td>93776</td>
<td>1.55</td>
<td>0.4</td>
<td>64943</td>
<td>4.08</td>
<td>0.97</td>
</tr>
<tr>
<td>Welch's</td>
<td>Dr Pepper</td>
<td>54194</td>
<td>1.31</td>
<td>0.34</td>
<td>158751</td>
<td>1.28</td>
<td>0.29</td>
<td>157569</td>
<td>3.8</td>
<td>0.84</td>
</tr>
<tr>
<td>Wild Cherry Pepsi</td>
<td>Pepsi</td>
<td>176707</td>
<td>1.51</td>
<td>0.17</td>
<td>410239</td>
<td>1.39</td>
<td>0.3</td>
<td>378436</td>
<td>3.91</td>
<td>1.01</td>
</tr>
</tbody>
</table>

Notes: An observation is a brand-size-store-week combination.
D.2 Price variance decomposition

To examine the sources of price variation in our data, we perform a decomposition of the variance of price for the subsample of 67.6 oz products, where an observation is a store–week–product combination. Table D.2 presents a decomposition into three week-level components: a chain component (capturing the average price level at the store’s chain level), a within-chain store-level component (capturing store-level deviations from the average price of its chain), and a within-store component (capturing differences across products within a store). The table shows that the two most significant factors explaining overall price variation are the within-store and the chain components (61.2% and 32.3% of the overall price variation when the analysis considers both sale and non-sale prices). The analysis suggests that consumers face significant price variation when comparing prices in a given store–week, and stores of the same chain tend to set similar prices (see DellaVigna and Gentzkow 2019 for related findings). The latter finding will lead us to study the robustness of our results to various levels of data aggregation (e.g., MSA–chain–year–product).

Table D.2: Price variance decomposition (67 oz products)

<table>
<thead>
<tr>
<th></th>
<th>Sample</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Nonsale</td>
</tr>
<tr>
<td>Chain–week component</td>
<td>0.323</td>
<td>0.538</td>
</tr>
<tr>
<td>Store–week (within chain–week) component</td>
<td>0.065</td>
<td>0.105</td>
</tr>
<tr>
<td>Within store–week component</td>
<td>0.612</td>
<td>0.357</td>
</tr>
</tbody>
</table>

Notes: The variance of price is decomposed using the identity \( p_{jst} = p_{ct} + (p_{st} - p_{ct}) + (p_{jst} - p_{st}) \), where \( p_{jst} \) is the price of product \( j \) at store–week \( (s,t) \), \( p_{ct} \) is the average price at chain–week \( (c,t) \), and \( p_{st} \) is the average price at store–week \( (s,t) \). The variance of \( p_{jst} \) is the sum of \( \text{var}(p_{ct}) \) (chain-week variation), \( \text{var}(p_{st} - p_{ct}) \) (store-level variation within chain–week), and \( \text{var}(p_{jst} - p_{st}) \) (within store–week variation). The table reports each of these components relative to total variance (i.e., \( \text{var}(p_{ct})/\text{var}(p_{jst}), \text{var}(p_{st} - p_{ct})/\text{var}(p_{jst}), \text{and } \text{var}(p_{jst} - p_{st})/\text{var}(p_{jst}) \), respectively).

D.3 Within-store price dispersion

In this section, we provide evidence on the extent of within-store price dispersion. We do this in two steps. First, Table D.3 presents examples of prices that consumers

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37Table D.3 presents examples of non-sale prices at different stores for the same week, and shows that even when restricting to the most popular products, consumers face significant within store–week price variation. We generalize this in Figure D.1, where we plot the distribution of the within-store–week standard deviation of price. The figure shows that within-store price variation is significant even within products of the same size.
faced when visiting different stores for one week in our sample. The table restricts
the analysis to “round number” prices (e.g., 1.15 as opposed to 1.13414) of products
that were not flagged as being on sale. Because our measure of prices is the average
price paid by consumers for a product in a given store–week combination, non-rounded
prices may arise when some consumers use coupons or when the store changed the price
of a product in the middle of a week. The table shows that even when considering the
most popular products, price dispersion across brands is not trivial.

Second, Figure D.1 reports the within-store price dispersion for products of different
sizes, using the full sample of regular prices as well as the subsample of round number
regular prices. The figure shows that prices vary significantly across products of the
same size, even when restricting attention to products that were not on sale.

<table>
<thead>
<tr>
<th>Product</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca Cola (67 oz)</td>
<td>1.49</td>
<td>1.59</td>
<td>1.49</td>
<td>1.49</td>
<td>1.69</td>
</tr>
<tr>
<td>Diet Coke (67 oz)</td>
<td>1.49</td>
<td>1.59</td>
<td>1.49</td>
<td>1.49</td>
<td>1.69</td>
</tr>
<tr>
<td>Pepsi (67 oz)</td>
<td>1.39</td>
<td>1.49</td>
<td>1.39</td>
<td>1.39</td>
<td>1.59</td>
</tr>
<tr>
<td>Diet Pepsi (67 oz)</td>
<td>1.39</td>
<td>1.49</td>
<td>1.39</td>
<td>1.39</td>
<td>1.59</td>
</tr>
<tr>
<td>Dr Pepper (67 oz)</td>
<td>1.29</td>
<td>1.59</td>
<td>1.39</td>
<td>1.29</td>
<td>1.59</td>
</tr>
<tr>
<td>Diet Dr Pepper (67 oz)</td>
<td>1.29</td>
<td>1.59</td>
<td>1.39</td>
<td>1.29</td>
<td>1.59</td>
</tr>
</tbody>
</table>

Notes: All of these examples correspond to IRI week 1429 (January 15-21, 2007). Each column corresponds to a different store. None of the prices in the table were flagged as a sale price in the data.
Figure D.1: Within store–week standard deviation of prices: Cumulative distribution function

Notes: The upper panel presents the within-store standard deviation of price across products of the same size, considering prices that are not flagged as a sale price. The lower panel repeats the analysis restricting the sample to round number prices.
D.4 Covariate balance before and after vertical integration

Table D.4 and Table D.5 explore differences in demographics, retail configuration, and consumption of substitute products (i.e., beer and milk) both before and after the vertical mergers between areas differentially impacted by vertical integration. Table D.4 shows differences between areas impacted and not impacted by vertical integration (e.g., the treated areas are on average wealthier, more populated, and have a larger number of retail stores than the untreated areas), and also shows that there were no differential changes in these variables across areas affected and unaffected by vertical integration.

Table D.5 reports averages of the number of liters of beer and milk (in logs) sold in a store–week combination. The table shows similar levels of consumption of beer, both before and after vertical integration, in areas impacted and not impacted by vertical integration. The table also suggests that a greater amount of milk was consumed in areas impacted by vertical integration throughout the sample period. Statistical tests cannot reject the hypothesis of no differential changes in the consumption of these goods in areas impacted by vertical integration (the p-values are 0.64 and 0.85 for beer and milk, respectively).

### Table D.4: Covariate balance before and after vertical integration

<table>
<thead>
<tr>
<th>Variable</th>
<th>Untreated Before VI</th>
<th>Treated After VI</th>
<th>(2)-(1)</th>
<th>Untreated Before VI</th>
<th>Treated After VI</th>
<th>(5)-(4)</th>
<th>(6)-(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean income</td>
<td>56574.03</td>
<td>69909.15</td>
<td>13335.12</td>
<td>59010.22</td>
<td>70923.56</td>
<td>11913.34</td>
<td>-1421.78</td>
</tr>
<tr>
<td></td>
<td>(12424.17)</td>
<td>(18879.13)</td>
<td>[0.000]</td>
<td>(11326.73)</td>
<td>(19037.87)</td>
<td>[0.000]</td>
<td>[0.501]</td>
</tr>
<tr>
<td>Population (in logs)</td>
<td>11.38</td>
<td>12.27</td>
<td>0.88</td>
<td>11.63</td>
<td>12.28</td>
<td>0.65</td>
<td>-0.23</td>
</tr>
<tr>
<td></td>
<td>(0.8)</td>
<td>(1.12)</td>
<td>[0.000]</td>
<td>(0.85)</td>
<td>(1.12)</td>
<td>[0.000]</td>
<td>[0.110]</td>
</tr>
<tr>
<td>Convenience stores</td>
<td>8.25</td>
<td>39.09</td>
<td>30.84</td>
<td>10.4</td>
<td>39.14</td>
<td>28.74</td>
<td>-2.1</td>
</tr>
<tr>
<td></td>
<td>(11.33)</td>
<td>(64.73)</td>
<td>[0.000]</td>
<td>(12.82)</td>
<td>(67.04)</td>
<td>[0.000]</td>
<td>[0.538]</td>
</tr>
<tr>
<td>Supermarkets</td>
<td>20.36</td>
<td>92.63</td>
<td>72.27</td>
<td>22.6</td>
<td>96.43</td>
<td>73.82</td>
<td>1.56</td>
</tr>
<tr>
<td></td>
<td>(20.92)</td>
<td>(197.95)</td>
<td>[0.000]</td>
<td>(21.7)</td>
<td>(219.07)</td>
<td>[0.000]</td>
<td>[0.868]</td>
</tr>
<tr>
<td>Temperature</td>
<td>61.68</td>
<td>54.24</td>
<td>-7.44</td>
<td>64.2</td>
<td>55.54</td>
<td>-8.66</td>
<td>-1.21</td>
</tr>
<tr>
<td></td>
<td>(7.29)</td>
<td>(7.41)</td>
<td>[0.000]</td>
<td>(2.19)</td>
<td>(6.84)</td>
<td>[0.000]</td>
<td>[0.158]</td>
</tr>
</tbody>
</table>

Notes: An observation is a county–year combination. The table reports averages of county–level characteristics for treated and untreated counties. Standard deviations are in parentheses. p-values of two-sided tests for equality of means in brackets. Income and population data at the county–year level were obtained from the U.S. Census Bureau’s American Community Survey (2007-2012). The number of convenience stores and supermarkets in each county–year were drawn from the US Census Bureau’s County Business Patterns database. Temperature at the county–month level was retrieved from NOAA’s National Climatic Data Center database (i.e., https://www.ncdc.noaa.gov/cag/county/time-series/).
**Table D.5:** Average number of liters (in logs) sold in a store–week combination

<table>
<thead>
<tr>
<th></th>
<th>Before VI</th>
<th>After VI</th>
<th></th>
<th>Before VI</th>
<th>After VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untreated</td>
<td>7.276</td>
<td>7.252</td>
<td>Untreated</td>
<td>7.775</td>
<td>7.590</td>
</tr>
<tr>
<td>Treated</td>
<td>7.283</td>
<td>7.143</td>
<td>Treated</td>
<td>8.337</td>
<td>8.218</td>
</tr>
</tbody>
</table>

A) Beer

B) Milk

Notes: The table reports averages of the number of liters sold in every store–week combination based on the IRI Marketing Data Set.
D.5 Evolution of average prices

Here we present the evolution of the average prices of both 20 oz and 144 oz products, separating by whether the products were bottled by vertically integrated bottlers. Similar to what is reported in Figure 2, the figure shows that the prices of treated and untreated products tracked each other before vertical integration, suggesting that there were no differential preexisting trends in these sets of products.

We complement the figures with a formal test for the existence of differential trends. Table D.6 presents regression estimates of residualized prices on a week indicator, an indicator that identifies products that started being produced by an integrated bottler after the vertical mergers, and the interaction of the two indicators. In the first stage, prices are residualized with respect to the other covariates included in our analysis (e.g., indicators for feature and display and county-level covariates). The table shows no evidence of differential trends before the vertical mergers.

![Graphs of price evolution](image)

(a) Coca-Cola 20 oz  (b) PepsiCo 20 oz  (c) Dr Pepper SG 20 oz

(d) Coca-Cola 144 oz  (e) PepsiCo 144 oz  (f) Dr Pepper SG 144 oz

**Figure D.2:** The evolution of prices before and after the mergers by whether the products were ever sold by a VI firm (products of 20 and 144 oz)

Notes: An observation is a firm–VI status–week combination, where VI status takes the value of one if the product was ever bottled by a VI firm (e.g., Coke bottled by CCE or Dr Pepper bottled by CCE). The dotted vertical lines indicate the first transaction.
<table>
<thead>
<tr>
<th>Dependent variable: residualized prices</th>
<th>Coca-Cola (1)</th>
<th>Dr Pepper SG (2)</th>
<th>Pepsi (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever integrated × Trend</td>
<td>0.0001</td>
<td>0.0000</td>
<td>-0.0001</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td>(0.0001)</td>
</tr>
<tr>
<td>Ever integrated</td>
<td>-0.0878</td>
<td>-0.0530</td>
<td>0.1184</td>
</tr>
<tr>
<td></td>
<td>(0.0672)</td>
<td>(0.0571)</td>
<td>(0.0758)</td>
</tr>
<tr>
<td>Week</td>
<td>-0.0000</td>
<td>-0.0000</td>
<td>0.0001</td>
</tr>
<tr>
<td></td>
<td>(0.0000)</td>
<td>(0.0000)</td>
<td>(0.0000)</td>
</tr>
<tr>
<td>Observations</td>
<td>7,417,588</td>
<td>7,058,387</td>
<td>7,714,048</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.0000</td>
<td>0.0001</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level. All specifications regress residualized prices on a week indicator, an indicator that identifies products that started being produced by an integrated bottler after the vertical mergers, and the interaction of the two indicators. In the first stage, prices are residualized with respect to the other covariates included in our analysis (e.g., indicators for feature and display and county-level covariates).
E Comparing estimates across research designs

With respect to the connection between the differences-in-differences and within-store estimators, we note that both estimators would deliver the same point estimates if the prices of nonintegrated products evolved similarly across all markets. To see this, suppose we have a sample of two markets with two time observations per market (i.e., one observation before and one after vertical integration). In the first market (market A), a subset of the products became integrated. In the second market (market B), vertical integration does not take place. In this context, the differences-in-differences estimator for product \( j \) would be \((p_{j,A,1} - p_{j,B,1}) - (p_{j,A,0} - p_{j,B,0})\), while the within-store estimator would be \((p_{j,A,1} - p_{\text{NoVI},A,1}) - (p_{j,A,0} - p_{\text{NoVI},A,0})\), where \( p_{\text{NoVI},A,t} \) is the average price of nonintegrated products in market A at time \( t \). From these expressions, it is clear that the estimates are equivalent when the changes in the prices of nonintegrated products is the same across markets: \( p_{j,B,1} - p_{j,B,0} = p_{\text{NoVI},A,1} - p_{\text{NoVI},A,0} \).

The estimates would for example differ if vertical integration caused changes in the prices of nonintegrated products in markets where at least one firm became integrated (e.g., via equilibrium feedback effects). Because these effects of vertical integration on the prices of nonintegrated products cannot exist in markets where vertical integration did not take place, these price effects could have made the prices of nonintegrated products to diverge across areas differentially impacted by vertical integration.

To examine this connection between estimators, we re-compute the within-store estimator on the same subsample used in Table 4 (Panel B), which is designed to minimize the role of equilibrium feedback effects. We report the estimates in Table E.1. A comparison between Table 4 (Panel B) and Table E.1 reveals that the estimates are almost identical, which is to be expected in the absence of equilibrium feedback effects. The similarity between the estimates is a strength of our paper, as both research designs rely on different sources of variation and identification assumptions.

\[38\] We note that these tables have different sample sizes because the within-store analysis pools the products of all upstream firms while the differences-in-differences analysis is at the upstream firm level.
Table E.1: The effect of vertical integration on prices (within-store estimates): Restricted treatment subsamples

<table>
<thead>
<tr>
<th></th>
<th>Coca-Cola/DPSG</th>
<th>PepsiCo/DPSG</th>
<th>PepsiCo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>-0.009</td>
<td>-0.006</td>
<td>-0.006</td>
</tr>
<tr>
<td>× Coca-Cola/PepsiCo product</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>0.012</td>
<td>-</td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td></td>
<td>(0.005)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>5,306,197</td>
<td>7,853,553</td>
<td>4,759,626</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.935</td>
<td>0.931</td>
<td>0.938</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (Column 1: 197 clusters; Column 2: 217 clusters; Column 3: 201 clusters). All specifications include store–week, product–week, and product–store fixed effects, as well as controls for feature and display. Column 1 restricts the sample to counties that were either untreated or in which only Coca-Cola integrated (and the Coca-Cola bottler did not bottle Dr Pepper SG products); column 2 restricts the sample to counties that were untreated and counties in which either Coca-Cola or PepsiCo integrated while bottling Dr Pepper SG products; and column 3 restricts the sample to counties that were either untreated or in which only PepsiCo integrated (and the PepsiCo bottler did not bottle Dr Pepper SG products).
F Additional analyses

F.1 Price indexes with national weights

In this subsection, we first explain the computation of the price indexes used in estimation and then replicate our price index differences-in-differences analysis using national rather than store-level indexes. This analysis will help us shed light on whether vertical integration caused an increase or decrease in quantity-weighted prices.

We construct the store–week price indexes as follows. For each store, we compute the average weekly quantity of each product in the period before vertical integration. For each store–week combination, we weigh each price by its average quantity in the period before vertical integration. For each store–week combination, we sum the weighted prices (i.e., price multiplied by its pre-vertical integration average quantity) and normalize the price index by dividing by the sum of weights of the products available in that store–week combination. We compute price indexes considering the full set of products in a store–week combination as well as price indexes on the subsets of Coca-Cola, Dr Pepper SG, and PepsiCo products.

Finally, we also use national rather than store-level price indexes. The results, which we present in Table F.1 are similar to those presented in the main text as we do not find significant price changes on average or for Coca-Cola products, while the price of PepsiCo products bottled by integrated bottlers decreased by 1.6 percent and the price of Dr Pepper SG products increased by 5.3 percent.
Table F.1: The effect of vertical integration on national price indexes  
(differences-in-differences estimates)

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable:</td>
<td>log(price index)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All products</td>
<td>0.006</td>
<td>0.005</td>
<td>0.053</td>
<td>-0.016</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>(0.007)</td>
<td>(0.007)</td>
<td>(0.009)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Observations</td>
<td>542,668</td>
<td>542,282</td>
<td>540,319</td>
<td>538,465</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.664</td>
<td>0.429</td>
<td>0.651</td>
<td>0.359</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (431 clusters). An observation is a store–week combination. Price indexes are computed based on pre-vertical integration average quantities at the product level, where the weight of each product in a given store–week combination is its average quantity across all store–week combinations in the pre-merger period. The price index in column 1 includes all products, whereas the price indexes in column 2 to 4 restrict the set of products to Coca-Cola, Dr Pepper SG, and PepsiCo products, respectively. All specifications include store and week fixed effects, as well as time-varying county-level controls.
F.2 Addressing potential selection

F.2.1 Blocking regression

In this section, we implement a blocking regression approach to ensure that control and treatment groups are comparable. To do this, we first estimate the likelihood of a county being exposed to treatment based on its demographics and market outcomes prior to the transactions. We do this by estimating the probability that a county is treated via maximum likelihood estimation of a logit model. The dependent variable is equal to one if a county is going to be exposed to vertical integration and zero otherwise. The independent variables are the same demographics included in the analyses presented above, in addition to the average shares, volume, and prices of the products of each firm (all measured using county-level averages over the pre-integration period).

We then use the estimated logit specification to predict the propensity score of each county of being exposed to treatment. We use this propensity score to assign both treated and untreated counties to bins, ensuring that both the propensity score and the explanatory variables included in the propensity score specification are balanced within each bin.

Once all counties, treated and untreated, have been assigned to propensity-score bins, we replicate Table 4 for each bin and estimate the effect of vertical integration on prices within each bin. Finally, we compute the overall price effect of vertical integration on the products of each upstream firm as the weighted average of the bin-specific price effects. Table F.2 reports the results and shows that our estimates do not change significantly relative to Table 4.
Table F.2: The effect of vertical integration on prices (differences-in-differences estimates): Propensity-score matching

<table>
<thead>
<tr>
<th>Vertical integration</th>
<th>Dependent variable: log(price)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coca-Cola</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
</tr>
<tr>
<td>Observations</td>
<td>15,751,752</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the store level. All specifications include product–week and product–store fixed effects, as well as time-varying county-level controls and controls for feature and display. Estimation is by blocking regressions. First, we compute the propensity score of each county of being exposed to vertical integration by Coca-Cola, PepsiCo, and Dr Pepper SG. We do this by estimating a logit model via maximum likelihood. We then group counties by propensity score, subject to the mean propensity score and covariates being balanced within each group. Then, we estimate Equation 1 for each firm and blocking group. Estimates reported in the table correspond to the weighted estimates according to the number of counties in each blocking group. Because under some specifications there are groups with fewer counties than parameters to be estimated, we cluster standard errors at the store rather than county level. Finally, we lose observations relative to Table 4, because estimation is performed on the subsample for which the common support assumption holds within each propensity-score group.
F.2.2 Neighboring counties

In Table F.3 and Table F.4 we repeat our differences-in-differences and within-store analyses (respectively), restricting the sample to neighbor counties that were differentially impacted by vertical integration. That is, two neighboring counties are included in the subsample if (i) they were both impacted by vertical integration but only one was exposed to the Edgeworth-Salinger effect, or (ii) only one was impacted by vertical integration. This restriction limits the sample to 132 counties (out of 443 counties in the baseline analysis). This subsample analysis allows us to compare price changes in counties that are very similar except for having been differentially impacted by vertical integration. The estimates remain largely unchanged, suggesting that our main results are not impacted by unobserved heterogeneity across counties that is not captured by the set of fixed effects included in our estimating equations.

Table F.3: The effect of vertical integration on prices (differences-in-differences estimates): Neighboring counties subsample

<table>
<thead>
<tr>
<th>Dependent variable: log(price)</th>
<th>Coca-Cola (1)</th>
<th>Dr Pepper SG (2)</th>
<th>PepsiCo (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical integration</td>
<td>-0.000</td>
<td>0.013</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.005)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Observations</td>
<td>6,072,345</td>
<td>5,984,326</td>
<td>6,501,197</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.905</td>
<td>0.897</td>
<td>0.882</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (130 clusters). All specifications include product–week and product–store fixed effects, as well as time-varying county-level controls and controls for feature and display. The neighboring-counties subsample restricts attention to bordering counties that were differentially impacted by vertical integration. For example, counties that did not experience vertical integration but had at least one neighboring county impacted by vertical integration would be included in the subsample.
<table>
<thead>
<tr>
<th></th>
<th>Dependent variable: log(price)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>Vertical integration</td>
<td>-0.009</td>
<td>0.013</td>
<td></td>
</tr>
<tr>
<td>× Coca-Cola/PepsiCo product</td>
<td>(0.003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration</td>
<td>0.013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.004)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration (Coca-Cola)</td>
<td>-0.014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× Coca-Cola product</td>
<td>(0.005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration (Coca-Cola)</td>
<td>0.015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration (PepsiCo)</td>
<td>-0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× PepsiCo product</td>
<td>(0.005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration (PepsiCo)</td>
<td>0.007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>18,557,740</td>
<td>18,557,740</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.905</td>
<td>0.905</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (132 clusters). All specifications include store–week, product–week, and product–store fixed effects, as well as controls for feature and display. The neighboring-counties subsample restricts attention to bordering counties that were differentially impacted by vertical integration. For example, counties that did not experience vertical integration but had at least one neighboring county impacted by vertical integration would be included in the subsample.
F.3 Aggregation

We explore the robustness of our results to different levels of aggregation in Table F.5 (differences-in-differences) and Table F.6 (within-store). Two reasons motivate this analysis. First, the serial correlation of prices may lead to inconsistent estimates of standard errors (see Bertrand et al. 2004). Second, chains set similar prices across their stores (see Table D.2 and DellaVigna and Gentzkow 2019), suggesting that there may be spillover effects when two nearby counties are differentially exposed to vertical integration. These analyses suggest robustness to both serial correlation of prices and spatial spillovers.

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39 We emphasize that throughout our analysis, we cluster standard errors at the treatment-unit level (i.e., county), which is an alternative solution to the problem of serially correlated outcomes (see Bertrand et al. 2004 for details).
Table F.5: The effect of vertical integration on prices (differences-in-differences estimates): Aggregation results

<table>
<thead>
<tr>
<th>Panel A: Bertrand–Duflo–Mullainathan aggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable: log(price)</td>
</tr>
<tr>
<td>Coca-Cola</td>
</tr>
<tr>
<td>(1)</td>
</tr>
<tr>
<td>Integration</td>
</tr>
<tr>
<td>(0.005)</td>
</tr>
<tr>
<td>Observations</td>
</tr>
<tr>
<td>$R^2$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: Chain–county–week aggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
</tr>
<tr>
<td>(0.005)</td>
</tr>
<tr>
<td>Observations</td>
</tr>
<tr>
<td>$R^2$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel C: Chain–county–quarter aggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
</tr>
<tr>
<td>(0.005)</td>
</tr>
<tr>
<td>Observations</td>
</tr>
<tr>
<td>$R^2$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel D: Chain–county–year aggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
</tr>
<tr>
<td>(0.005)</td>
</tr>
<tr>
<td>Observations</td>
</tr>
<tr>
<td>$R^2$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel E: Chain–MSA–week aggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
</tr>
<tr>
<td>(0.011)</td>
</tr>
<tr>
<td>Observations</td>
</tr>
<tr>
<td>$R^2$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel F: Chain–MSA–quarter aggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
</tr>
<tr>
<td>(0.011)</td>
</tr>
<tr>
<td>Observations</td>
</tr>
<tr>
<td>$R^2$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel G: Chain–MSA–year aggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
</tr>
<tr>
<td>(0.011)</td>
</tr>
<tr>
<td>Observations</td>
</tr>
<tr>
<td>$R^2$</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (panels A-D with 443 clusters) or MSA level (panels E-G with 50 clusters) in parentheses. All specifications include (aggregated) time-varying county-level controls. All specifications include product–time period and product–store/county/MSA fixed effects.
Table F.6: The effect of vertical integration on prices (within-store estimates): Aggregation results

<table>
<thead>
<tr>
<th>Aggregation level</th>
<th>Store Pre/Post Product</th>
<th>County Week Product</th>
<th>County Quarter Product</th>
<th>County Year Product</th>
<th>MSA Week Product</th>
<th>MSA Quarter Product</th>
<th>MSA Year Product</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>-0.011 (0.003)</td>
<td>-0.010 (0.002)</td>
<td>-0.010 (0.002)</td>
<td>-0.008 (0.002)</td>
<td>-0.010 (0.004)</td>
<td>-0.006 (0.004)</td>
<td>-0.007 (0.003)</td>
</tr>
<tr>
<td>× Coca-Cola/PepsiCo product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration</td>
<td>0.011 (0.002)</td>
<td>0.010 (0.002)</td>
<td>0.007 (0.002)</td>
<td>0.006 (0.002)</td>
<td>0.010 (0.004)</td>
<td>0.008 (0.004)</td>
<td>0.007 (0.003)</td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>401,908</td>
<td>30,181,251</td>
<td>2,715,122</td>
<td>718,325</td>
<td>10,400,894</td>
<td>905,010</td>
<td>236,227</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.992</td>
<td>0.907</td>
<td>0.976</td>
<td>0.986</td>
<td>0.921</td>
<td>0.976</td>
<td>0.985</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (columns 1-4, 442 clusters) or MSA level (columns 5-7, 50 clusters). All specifications include store–time period, product–time period, and product–store fixed effects, as well as controls for feature and display.
F.4 Placebos

To examine whether the estimated price effects of vertical integration on Dr Pepper SG products could be caused by chance, we perform four placebo exercises. Each of these exercises consists of 1,000 replications.

In the first exercise, we randomly draw the counties exposed to vertical integration, the moment at which vertical integration took place, and the subset of Dr Pepper SG products that were affected by vertical integration. Figure F.1a reports our findings and shows that the estimate effect reported in Table 4 (Panel A, Column 2) lies on the right tail of the distribution of placebo estimates, with an associated p-value of 0.015. This suggests that the estimated price increase of Dr Pepper SG products caused by vertical integration is unlikely to have occurred by chance.

In the second exercise, we repeat the analysis but now for Table 6. In this case, we estimate the impact of vertical integration on both own and Dr Pepper SG products that are sold within the same store. We report our findings in Figure F.1b. Though the figure omits some extreme values that would make it uninformative, the figure shows that few placebo estimates lie in the area in which they suggest that the relative price of own brands decreased more—and the relative price of Dr Pepper SG brands increased more—than the estimates we reported in the main text. In this case the p-value is 0.054, which also suggests that it is unlikely that the estimated price effects happened by chance.

Finally, we also estimate Table 4 for two product categories different from carbonated soda: beer and milk. We do this to examine whether the price effects estimated for Dr Pepper SG products also took place in these categories that were not affected by vertical integration. In these cases, we performed 1,000 placebo replications, holding fixed the counties in which vertical integration took place, and when it occurred, and we randomize the firm and its subset of products that were affected by vertical integration. Figure F.2 shows that, as it was the case above, the estimated price change for Dr Pepper SG products bottled by a vertically integrated bottler lies on the right tail of the distributions of placebo estimates, suggesting it is unlikely that the estimated effect was caused by chance.
FIGURE F.1: Placebo exercises

Notes: The upper panel presents the distribution of placebo estimates for the differences-in-differences analysis of Dr Pepper SG prices. The dashed vertical line corresponds to the estimated effect reported in Table 4 (Panel A, Column 2). The p-value for this estimate is 0.015. We implement the placebo exercises randomizing on three dimensions: when vertical integration took place, where it took place, and which products were affected. The lower panel repeats the analysis for the within-store analysis. In this case, the dashed vertical and horizontal lines report the estimated coefficients reported in Table 6 (Column 1). The black dots reported in the scatter plot correspond to placebo estimates that are larger than those reported in Table 6. The associated p-value is 0.054. The figure leaves out extreme values, but computation of the p-values considers the 1,000 placebo exercises.
Figure F.2: Placebo exercises

Notes: The upper panel presents the distribution of placebo estimates for the differences-in-differences analysis using milk products. The dashed vertical line corresponds to the estimated effect reported in Table 4 (Panel A, Column 2). The p-value for this estimate is 0.006. The lower panel repeats the analysis for beer products. In this case the p-value of the estimated effect is 0.044.
F.5 Clustering

In our main analysis we cluster errors at the county level. This choice is primarily driven by the fact that treatment is at the county level and not at the MSA level. That is, two neighboring counties may have been differentially impacted by vertical integration. While pricing incentives vary at the county level, one may be concerned about within-MSA residual price correlation due to shocks at the MSA level. As a robustness check, we replicate our main table with clustering at the MSA level in Table F.7 and Table F.8. The only notable difference is that we lose precision in Table F.8 (Column 2), where we decompose the impacts of vertical integration by upstream firm.

Table F.7: The effect of vertical integration on prices (differences-in-differences estimates): MSA clustering

<table>
<thead>
<tr>
<th>Vertical integration</th>
<th>Coca-Cola (1)</th>
<th>Dr Pepper SG (2)</th>
<th>PepsiCo (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.003 (0.006)</td>
<td>0.015 (0.004)</td>
<td>-0.006 (0.010)</td>
</tr>
<tr>
<td>Observations</td>
<td>15,756,886</td>
<td>15,935,207</td>
<td>17,051,189</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.910</td>
<td>0.903</td>
<td>0.891</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the MSA level (50 clusters). All specifications include product-week and product-store fixed effects, as well as time-varying county-level controls and controls for feature and display.
Table F.8: The effect of vertical integration on prices (within-store estimates): MSA clustering

<table>
<thead>
<tr>
<th></th>
<th>Dependent variable: log(price)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>-0.012</td>
</tr>
<tr>
<td>× Coca-Cola/PepsiCo product</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>0.015</td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Vertical integration (Coca-Cola)</td>
<td></td>
</tr>
<tr>
<td>× Coca-Cola product</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Vertical integration (Coca-Cola)</td>
<td></td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Vertical integration (PepsiCo)</td>
<td>-0.012</td>
</tr>
<tr>
<td>× PepsiCo product</td>
<td>(0.010)</td>
</tr>
<tr>
<td>Vertical integration (PepsiCo)</td>
<td>0.007</td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Observations</td>
<td>48,743,206</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.905</td>
</tr>
<tr>
<td></td>
<td>48,743,206</td>
</tr>
<tr>
<td></td>
<td>0.905</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (50 clusters). All specifications include store–week, product–week, and product–store fixed effects, as well as time-varying county-level controls and controls for feature and display.
G Sub-sample analyses

G.1 Regular and sales prices

In this section, we first document the extent of temporary price reductions in the carbonated-beverage industry. Table G.1 shows that between 39 and 45 percent of the time, a product may be on sale. Table G.2 and Table G.3 show that the results of our differences-in-differences and within-store analyses, respectively, do not vary depending on whether a product is on sale or not. Further, Table G.4 examines whether vertical integration had any impact on the frequency with which vertically integrated bottlers implemented price promotions relative to nonintegrated bottlers. We find no evidence of vertical integration causing a change in the frequency of promotions.

Table G.1: Frequency of temporary price reductions by upstream firm

<table>
<thead>
<tr>
<th>Share of product–store–weeks</th>
<th>with a temporary price reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coca-Cola products</td>
<td>0.418</td>
</tr>
<tr>
<td>Dr Pepper SG products</td>
<td>0.393</td>
</tr>
<tr>
<td>PepsiCo products</td>
<td>0.451</td>
</tr>
<tr>
<td>Total</td>
<td>0.422</td>
</tr>
</tbody>
</table>

Notes: An observation is a product–store–week combination. An observation is classified as being on sale if the temporary price reduction is 5 percent or greater.
**Table G.2**: The effect of vertical integration on prices (differences-in-differences estimates): Regular and sale prices

<table>
<thead>
<tr>
<th></th>
<th>Coca-Cola (1)</th>
<th>Dr Pepper SG (2)</th>
<th>PepsiCo (3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subsample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration</td>
<td>0.006</td>
<td>0.002</td>
<td>0.013</td>
<td>0.015</td>
<td>-0.009</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Observations</td>
<td>9,165,010</td>
<td>6,587,902</td>
<td>9,653,494</td>
<td>6,278,308</td>
<td>9,348,662</td>
<td>7,697,017</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.954</td>
<td>0.924</td>
<td>0.950</td>
<td>0.928</td>
<td>0.933</td>
<td>0.923</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (443 clusters). All specifications include product–week and product–store fixed effects, as well as time-varying county-level controls and controls for feature and display.

**Table G.3**: The effect of vertical integration on prices (within-store estimates): Regular and sale prices

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subsample</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration</td>
<td>-0.010</td>
<td>-0.016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× Coca-Cola/PepsiCo product</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration</td>
<td>0.015</td>
<td>0.019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration (Coca-Cola)</td>
<td>-0.011</td>
<td>-0.018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× Coca-Cola product</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration (Coca-Cola)</td>
<td>0.017</td>
<td>0.031</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration (PepsiCo)</td>
<td>-0.008</td>
<td>-0.012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× PepsiCo product</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical integration (PepsiCo)</td>
<td>0.010</td>
<td>0.008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× Dr Pepper SG product</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>28,166,818</td>
<td>28,166,818</td>
<td>20,560,389</td>
<td>20,560,389</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.952</td>
<td>0.952</td>
<td>0.942</td>
<td>0.942</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (443 clusters). All specifications include store–week, product–week, and product–store fixed effects, as well as controls for feature and display.
Table G.4: The effect of vertical integration on the frequency of price promotions (differences-in-differences estimates)

<table>
<thead>
<tr>
<th>Vertical integration</th>
<th>Coca-Cola (1)</th>
<th>Dr Pepper SG (2)</th>
<th>PepsiCo (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent variable:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price promotion</td>
<td>0.007</td>
<td>-0.007</td>
<td>-0.009</td>
</tr>
<tr>
<td>indicator</td>
<td>(0.011)</td>
<td>(0.005)</td>
<td>(0.011)</td>
</tr>
<tr>
<td>Observations</td>
<td>15,773,639</td>
<td>15,952,984</td>
<td>17,058,040</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.388</td>
<td>0.307</td>
<td>0.400</td>
</tr>
</tbody>
</table>

Notes: Standard errors clustered at the county level (443 clusters). All specifications include product–week and product–store fixed effects, as well as time-varying county-level controls and controls for feature and display.
G.2 Heterogeneity results by type of chain

To examine heterogeneity across different types of chains—for example, because of time-invariant heterogeneity in exposure to rebate policies—we repeat our differences-in-differences analysis allowing for the effects of vertical integration on prices to vary by type of chain. Specifically, we define two chain-level indicators, large (i.e., more than 20 stores) and national (i.e., presence in more than one census region), and interact these indicators with the vertical integration indicator in Equation 1. Table G.5 presents estimates for this heterogeneity analysis. The table shows that vertical integration caused a larger increase in the prices of Dr Pepper SG products in stores belonging to small and local chains, though the differences are not statistically significant. The table also shows that the decrease in prices of PepsiCo products caused by vertical integration was larger in stores belonging to small and local chains.

| Table G.5: The effect of vertical integration on prices (differences-in-differences estimates): Heterogeneity results by type of chain |
|---------------------------------|---------------------------------|---------------------------------|
|                                | Coca-Cola (1)                      | Dr Pepper (2)                   | PepsiCo (3)                      |
|                                |      |      |      |      |      |      |
| VI                             | -0.000 | 0.001 | -0.000 | 0.018 | 0.018 | 0.017 | -0.008 | -0.010 | -0.011 |
|                                | (0.005) | (0.005) | (0.005) | (0.004) | (0.003) | (0.003) | (0.005) | (0.005) | (0.005) |
| VI × Large                     | 0.005 | -0.004 | 0.004 |
|                                | (0.005) | (0.005) | (0.005) |
| VI × National                  | 0.003 | -0.005 | 0.008 |
|                                | (0.004) | (0.004) | (0.004) |
| VI × (Large & National)        | 0.008 | -0.004 | 0.011 |
|                                | (0.004) | (0.004) | (0.004) |
| Observations                   | 15,797,101 | 15,797,104 | 15,797,101 | 15,975,949 | 15,975,949 | 15,975,949 | 17,097,916 | 17,097,916 | 17,097,916 |
| $R^2$                          | 0.910 | 0.910 | 0.910 | 0.903 | 0.903 | 0.903 | 0.891 | 0.891 | 0.891 |
| Prod-Week FE                   | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Prod-Store FE                  | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| p-value $VI + VI \times Char = 0$ | 0.299 | 0.308 | 0.115 | 0.000 | 0.001 | 0.000 | 0.380 | 0.764 | 0.837 |

Notes: Standard errors clustered at the county level (443 clusters). All specifications include product–week and product–store fixed effects, as well as time-varying county-level controls and controls for feature and display. The treatment and control group are the same as in Table 4 (Panel A). Large chains are chains with more than 20 stores. National chains are chain that are present in more than one census region. The last row of the table reports the p-value of an F-test for whether $VI + VI \times Char = 0$, with $Char \in \{\text{Large, National, Large&National}\}$.  

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### G.3 Differences-in-differences estimates excluding the 20 oz product category

In this section we replicate our differences-in-differences analysis excluding the 20 oz product category in light of the data presented in Section D.5, which suggests that integrated and nonintegrated products in this category may have followed different price trends before vertical integration. The results, presented in Table G.6, show that excluding the 20 oz product category does not have material impact on our findings.

**Table G.6: The effect of vertical integration on prices (differences-in-differences estimates; 67 and 144 oz products only)**

<table>
<thead>
<tr>
<th></th>
<th>Coca-Cola (1)</th>
<th>Dr Pepper SG (2)</th>
<th>PepsiCo (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical integration</td>
<td>-0.000</td>
<td>0.017</td>
<td>-0.007</td>
</tr>
<tr>
<td>(0.005)</td>
<td>(0.004)</td>
<td>(0.006)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>12,456,338</td>
<td>12,819,915</td>
<td>13,302,545</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.895</td>
<td>0.902</td>
<td>0.882</td>
</tr>
</tbody>
</table>

**Panel B: Restricted treatment subsample**

| Vertical integration     | -0.012       | 0.013            | -0.006      |
| (0.007)                  | (0.005)      | (0.006)          |             |
| Observations             | 1,377,376    | 1,988,718        | 1,293,243   |
| $R^2$                    | 0.925        | 0.919            | 0.916       |

Notes: Standard errors clustered at the county level (443 clusters). All specifications include product-week and product-store fixed effects, as well as time-varying county-level controls and controls for feature and display. Panel A includes the full sample of 67 and 144 oz products. Panel B drops the observations that were indirectly treated (i.e., products bottled by nonintegrated bottlers in store-week combinations where at least one product was bottled by an integrated bottler) and restricts the sample to counties that were either untreated or where only Coca-Cola integrated and the Coca-Cola bottler did not bottle Dr Pepper SG products (column 1); counties in which either Coca-Cola or PepsiCo integrated while bottling Dr Pepper SG products (column 2); and counties where only PepsiCo integrated and the PepsiCo bottler did not bottle Dr Pepper SG products (column 3).
ANNEX

to the

COMMUNICATION FROM THE COMMISSION

Approval of the content of a draft for a Commission Regulation on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices
ANNEX

COMMISSION REGULATION (EU) …/…

of XXX

on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices

DRAFT

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation No 19/65/EEC of the Council of 2 March 1965 on the application of Article 85(3) of the Treaty to certain categories of agreements and concerted practices †, and in particular Article 1 thereof,

Having published a draft of this Regulation,

After consulting the Advisory Committee on Restrictive Practices and Dominant Positions,

Whereas:

(1) Regulation No 19/65/EEC empowers the Commission to apply Article 101(3) of the Treaty on the Functioning of the European Union ‡ (“the Treaty”) by regulation to certain categories of vertical agreements and corresponding concerted practices falling within Article 101(1) of the Treaty.

(2) Commission Regulation (EU) No 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices § defines a category of vertical agreements which the Commission regarded as normally satisfying the conditions laid down in Article 101(3) of the Treaty. The experience with the application of that Regulation, which expires on 31 May 2022, has been overall positive, as identified in the evaluation of that Regulation. Taking into account the experience acquired since its adoption, including experience with new market developments, such as the growth of e-commerce, as well as new or more prevalent types of vertical agreements, it is appropriate to adopt a new block exemption regulation.

(3) The category of agreements which can be regarded as normally satisfying the conditions laid down in Article 101(3) of the Treaty includes vertical agreements for the purchase or sale of goods or services where those agreements are concluded between non-competing undertakings, between certain competitors or by certain

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‡ With effect from 1 December 2009, Article 81 of the EC Treaty has become Article 101 of the Treaty on the Functioning of the European Union. The two Articles are, in substance, identical. For the purposes of this Regulation, references to Article 101 of the Treaty on the Functioning of the European Union should be understood as references to Article 81 of the EC Treaty where appropriate.

associations of retailers of goods. It also includes vertical agreements containing ancillary provisions on the assignment or use of intellectual property rights. The term ‘vertical agreements’ should include the corresponding concerted practices.

(4) For the application of Article 101(3) of the Treaty by regulation, it is not necessary to define those vertical agreements which are capable of falling within Article 101(1) of the Treaty. In the individual assessment of agreements under Article 101(1) of the Treaty, account has to be taken of several factors, in particular the market structure on the supply and purchase side.

(5) The benefit of the block exemption established by this Regulation should be limited to vertical agreements for which it can be assumed with sufficient certainty that they satisfy the conditions of Article 101(3) of the Treaty.

(6) Certain types of vertical agreements can improve economic efficiency within a chain of production or distribution by facilitating better coordination between the participating undertakings. In particular, they can lead to a reduction in the transaction and distribution costs of the parties and to an optimisation of their sales and investment levels.

(7) The likelihood that such efficiency-enhancing effects will outweigh any anti-competitive effects due to restrictions contained in vertical agreements depends on the degree of market power of the parties to the agreement and, therefore, on the extent to which those undertakings face competition from other suppliers of goods or services regarded by their customers as interchangeable or substitutable for one another, by reason of the products’ characteristics, their prices and their intended use.

(8) It can be presumed that, where the market share held by each of the undertakings party to the agreement on the relevant market does not exceed 30%, vertical agreements which do not contain certain types of severe restrictions of competition generally lead to an improvement in production or distribution and allow consumers a fair share of the resulting benefits.

(9) Above the market share threshold of 30%, there can be no presumption that vertical agreements falling within the scope of Article 101(1) of the Treaty will usually give rise to objective advantages of such a character and size as to compensate for the disadvantages which they create for competition. At the same time, there is no presumption that those vertical agreements are either caught by Article 101(1) of the Treaty or that they fail to satisfy the conditions of Article 101(3) of the Treaty.

(10) The online platform economy plays an increasingly important role in the distribution of goods and services. The undertakings active in the online platform economy enable new ways of doing business, some of which are not easy to categorise using the concepts traditionally associated with vertical relationships between suppliers and distributors in the brick and mortar environment. However, where such undertakings are providers of online intermediation services, it is appropriate to categorise them as suppliers under this Regulation. Providers of online intermediation services allow undertakings to offer goods or services to other undertakings or to consumers with a view to facilitating direct transactions between such undertakings or between such undertakings and consumers, irrespective of whether and where those transactions are ultimately concluded. This categorisation also applies when the provider of online intermediation services provides multiple services or services at multiple levels in the distribution chain.
The definition of provider of online intermediation services provided for in this Regulation is based on the definition used in Regulation 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services. However, the application of this definition has to take into account the context of this Regulation. In particular, taking into account the scope of Article 101 of the Treaty, only agreements between providers of online intermediation services and other undertakings fall within the scope of this Regulation. These agreements are considered to be vertical agreements within the meaning of this Regulation.

Providers of online intermediation services should not benefit from the block exemption established by this Regulation where they have a hybrid function, that is where they sell goods or services in competition with undertakings to which they provide online intermediation services. This is because the retail activities of providers of online intermediation services that have such a hybrid function typically affect inter-brand competition and may therefore raise non-negligible horizontal concerns.

This Regulation should not exempt vertical agreements containing restrictions which are likely to restrict competition and harm consumers or which are not indispensable to the attainment of the efficiency-enhancing effects. In particular, vertical agreements containing certain types of severe restrictions of competition such as minimum and fixed resale prices, certain types of territorial protection, or the prevention of the effective use of the Internet for the purposes of selling online or of the effective use of certain online advertising channels, should be excluded as a whole from the benefit of the block exemption established by this Regulation irrespective of the market share of the undertakings concerned. Therefore, online sales restrictions benefit from the block exemption established by this Regulation, provided that they do not have as their object to, directly or indirectly, prevent the effective use of the internet by the buyers or their customers for the purposes of selling their goods or services online, for instance because it is capable of significantly diminishing the overall amount of online sales in the market.

To ensure that this Regulation does not exempt restrictions for which it cannot be assumed with sufficient certainty that they satisfy the conditions of Article 101(3) of the Treaty, in particular to ensure access to or to prevent collusion on the relevant market, certain conditions should be attached to the block exemption. To this end, the exemption of non-compete obligations should be limited to obligations which do not exceed a defined duration. For the same reason, any direct or indirect obligation causing the members of a selective distribution system not to sell the brands of particular competing suppliers should be excluded from the benefit of this Regulation. Lastly, parity obligations causing buyers of online intermediation services not to offer, sell or resell goods or services to end users under more favourable conditions using competing online intermediation services should also be excluded from the benefit of this Regulation.

The market-share limitation, the non-exemption of certain vertical agreements and the conditions provided for in this Regulation normally ensure that the agreements to which the block exemption applies do not enable the participating undertakings to eliminate competition in respect of a substantial part of the goods or services in question.

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The Commission may withdraw the benefit of this Regulation, pursuant to Article 29(1) of Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, where it finds in a particular case that an agreement to which the exemption provided for in this Regulation applies nevertheless has effects which are incompatible with Article 101(3) of the Treaty. The competition authority of a Member State may withdraw the benefit of this Regulation in respect of the territory of that Member State, or a part thereof where the conditions of Article 29(2) of Regulation (EC) No 1/2003 are fulfilled.

Where the Commission or the competition authority of a Member State withdraws the benefits of this Regulation, it has the burden of proving that the vertical agreement in question falls within the scope of Article 101(1) of the Treaty, and that this agreement fails to fulfil at least one of the four conditions of Article 101(3) of the Treaty.

In determining whether the benefit of this Regulation should be withdrawn pursuant to Article 29 of Regulation (EC) No 1/2003, the anti-competitive effects that may derive from the existence of parallel networks of vertical agreements that have similar effects, which significantly restrict access to a relevant market or competition therein, are of particular importance. Such cumulative effects may for example arise in the case of shared exclusivity, exclusive supply, selective distribution, parity obligations or non-compete obligations.

In order to strengthen the supervision of parallel networks of vertical agreements which have similar anti-competitive effects and which cover more than 50% of a given market, the Commission may by regulation declare this Regulation inapplicable to vertical agreements containing specific restraints relating to the market concerned, thereby restoring the full application of Article 101 of the Treaty to such agreements.

HAS ADOPTED THIS REGULATION:

**Article 1**

Definitions

1. For the purposes of this Regulation, the following definitions shall apply:
   
   (a) ‘vertical agreement’ means an agreement or concerted practice entered into between two or more undertakings each of which operates, for the purposes of the agreement or the concerted practice, at a different level of the production or distribution chain, and relating to the conditions under which the parties may purchase, sell or resell certain goods or services;
   
   (b) ‘vertical restraint’ means a restriction of competition in a vertical agreement falling within the scope of Article 101(1) of the Treaty;
   
   (c) ‘competing undertaking’ means an actual or potential competitor; ‘actual competitor’ means an undertaking that is active on the same relevant market; ‘potential competitor’ means an undertaking that, in the absence of the vertical agreement, would, on realistic grounds and not just as a mere theoretical possibility, in case of a small but permanent increase in relative prices be likely

to undertake, within a short period of time, the necessary additional investments or other necessary switching costs to enter the relevant market;

(d) ‘supplier’ includes an undertaking that provides online intermediation services irrespective of whether it is a party to the transaction it facilitates; ‘online intermediation services’ means services that allow undertakings to offer goods or services to other undertakings or to end users with a view to facilitating direct transactions between such undertakings or between such undertakings and end users, irrespective of whether and where those transactions are ultimately concluded, and that constitute information society services within the meaning of point (b) of Article 1(1) of Directive (EU) 2015/1535 of the European Parliament and of the Council;

(e) ‘non-compete obligation’ means any direct or indirect obligation causing the buyer not to manufacture, purchase, sell or resell goods or services which compete with the contract goods or services, or any direct or indirect obligation on the buyer to purchase from the supplier or from another undertaking designated by the supplier more than 80% of the buyer’s total purchases of the contract goods or services and their substitutes on the relevant market, calculated on the basis of the value or, where such is standard industry practice, the volume of its purchases in the preceding calendar year;

(f) ‘selective distribution system’ means a distribution system where the supplier undertakes to sell the contract goods or services, either directly or indirectly, only to distributors selected on the basis of specified criteria and where these distributors undertake not to sell such goods or services to unauthorised distributors within the territory reserved by the supplier to operate that system;

(g) ‘exclusive distribution system’ means a distribution system where the supplier allocates a territory or customer group exclusively to itself or to one or a limited number of buyers, determined in proportion to the allocated territory or customer group in such a way as to secure a certain volume of business that preserves their investment efforts, and restricts other buyers from actively selling into the exclusive territory or to the exclusive customer group;

(h) ‘intellectual property rights’ includes industrial property rights, know-how, copyright and neighbouring rights;

(i) ‘know-how’ means a package of non-patented practical information, resulting from experience and testing by the supplier, which is secret, substantial and identified; ‘secret’ means that the know-how is not generally known or easily accessible; ‘substantial’ means that the know-how is significant and useful to the buyer for the use, sale or resale of the contract goods or services; ‘identified’ means that the know-how is described in a sufficiently comprehensive manner so as to make it possible to verify that it fulfils the criteria of secrecy and substantiality;

(j) ‘buyer’ includes an undertaking which, under an agreement falling within Article 101(1) of the Treaty, sells goods or services on behalf of another undertaking;

(k) ‘customer of the buyer’ means an undertaking not party to the agreement which purchases the contract goods or services from a buyer which is party to the agreement;
‘active’ sales mean all forms of selling other than passive sales, including actively targeting customers by visits, letters, emails, calls or other means of direct communication or through targeted advertising and promotion, offline or online, for instance by means of print or digital media, including online media, price comparison tools or advertising on search engines targeting customers in specific territories or customer groups; offering on a website language options different than the ones commonly used on the territory in which the distributor is established is normally active selling; similarly, offering a website with a domain name corresponding to a territory other than the one in which the distributor is established constitutes active selling;

‘passive’ sales mean sales in response to unsolicited requests from individual customers, including delivery of goods or services to such customers without having initiated the sale through advertising actively targeting the particular customer group or territory, and participating in public procurement;

‘restriction of active or passive’ sales means a restriction of active sales within the meaning of Article 1(l) or passive sales within the meaning of Article 1(m). As regards selling of goods and services online, a restriction that, directly or indirectly, in isolation or combination with other factors, has as its object to prevent the buyers or their customers from effectively using the Internet for the purposes of selling their goods or services online or from effectively using one or more online advertising channels is a restriction of active or passive sales, which, directly or indirectly, in isolation or in combination with other factors controlled by either party, has as its object to restrict the territory into which or the customer group to whom the buyers may sell the contract goods or services or, in the case of selective distribution, to restrict active or passive sales to end users by members of the selective distribution system operating at the retail level of trade.

2. For the purposes of this Regulation, the terms ‘undertaking’, ‘supplier’ and ‘buyer’ shall include their respective connected undertakings.

‘Connected undertakings’ means:

(a) undertakings in which a party to the agreement, directly or indirectly:

(i) has the power to exercise more than half the voting rights, or

(ii) has the power to appoint more than half the members of the supervisory board, board of management or bodies legally representing the undertaking, or

(iii) has the right to manage the undertaking’s affairs;

(b) undertakings which directly or indirectly have, over a party to the agreement, the rights or powers listed in point (a);

(c) undertakings in which an undertaking referred to in point (b) has, directly or indirectly, the rights or powers listed in point (a);

(d) undertakings in which a party to the agreement together with one or more of the undertakings referred to in points (a), (b) or (c), or in which two or more of the latter undertakings, jointly have the rights or powers listed in point (a);

(e) undertakings in which the rights or the powers listed in point (a) are jointly held by:
(i) parties to the agreement or their respective connected undertakings referred to in points (a) to (d), or

(ii) one or more of the parties to the agreement or one or more of their connected undertakings referred to in points (a) to (d) and one or more third parties.

Article 2
Exemption

1. Pursuant to Article 101(3) of the Treaty and subject to the provisions of this Regulation, it is hereby declared that Article 101(1) of the Treaty shall not apply to vertical agreements.

This exemption shall apply to the extent that such agreements contain vertical restraints.

2. The exemption provided for in paragraph 1 shall apply to vertical agreements entered into between an association of undertakings and an individual member, or between such an association and an individual supplier, only if all its members are retailers of goods and if no individual member of the association, together with its connected undertakings, has a total annual turnover exceeding EUR 50 million. Vertical agreements entered into by such associations shall be covered by this Regulation without prejudice to the application of Article 101 of the Treaty to horizontal agreements concluded between the members of the association or decisions adopted by the association.

3. The exemption provided for in paragraph 1 shall apply to vertical agreements containing provisions which relate to the assignment to the buyer or use by the buyer of intellectual property rights, provided that those provisions do not constitute the primary object of such agreements and are directly related to the use, sale or resale of goods or services by the buyer or its customers. The exemption applies on condition that, in relation to the contract goods or services, those provisions do not contain restrictions of competition having the same object as vertical restraints which are not exempted under this Regulation.

4. The exemption provided for in paragraph 1 shall not apply to vertical agreements entered into between competing undertakings. However, the exemption provided for in paragraph 1 shall apply to all aspects of a non-reciprocal vertical agreement between competing undertakings where:

(a) the supplier is a manufacturer, wholesaler, or importer and a distributor of goods, while the buyer is a distributor and not a competing undertaking at the manufacturing, wholesale or import level, and their aggregate market share in the relevant market at retail level does not exceed [10]%; or

(b) the supplier is a provider of services at several levels of trade, while the buyer provides its services at the retail level and is not a competing undertaking at the level of trade where it purchases the contract services, and their aggregate market share in the relevant market at retail level does not exceed [10]%.

5. If the competing supplier and buyer referred to in Article 2(4)(a) or (b) have an aggregate market share that exceeds [10]% in the relevant market at retail level but that does not exceed the market share thresholds of Article 3, the exemption provided
for in paragraph 1 shall apply, except for any exchange of information between the parties, which has to be assessed under the rules applicable to horizontal agreements.

6. The exceptions of Article 2(4)(a) and (b) and Article 2(5) shall not apply to vertical agreements which, directly or indirectly, in isolation or in combination with other factors under the control of the parties, have as their object to restrict competition between the competing supplier and buyer.

7. The exceptions of Article 2(4)(a) and (b) shall not apply where a provider of online intermediation services that also sells goods or services in competition with undertakings to which it provides online intermediation services enters into a non-reciprocal vertical agreement with such a competing undertaking.

8. This Regulation shall not apply to vertical agreements the subject matter of which falls within the scope of any other block exemption regulation, unless otherwise provided for in such a regulation.

Article 3
Market share threshold

1. The exemption provided for in Article 2 shall apply on condition that the market share held by the supplier does not exceed 30% of the relevant market on which it sells the contract goods or services and the market share held by the buyer does not exceed 30% of the relevant market on which it purchases the contract goods or services.

2. For the purposes of paragraph 1, where in a multi-party agreement an undertaking buys the contract goods or services from one undertaking that is a party to the agreement and sells the contract goods or services to another undertaking that is also a party to the agreement, the market share of the first undertaking must respect the market share threshold provided for in that paragraph both as a buyer and a supplier in order for the exemption provided for in Article 2 to apply.

Article 4
Restrictions that remove the benefit of the block exemption - hardcore restrictions

The exemption provided for in Article 2 shall not apply to vertical agreements which, directly or indirectly, in isolation or in combination with other factors under the control of the parties, have as their object:

(a) the restriction of the buyer’s ability to determine its sale price, without prejudice to the possibility of the supplier to impose a maximum sale price or recommend a sale price, provided that they do not amount to a fixed or minimum sale price as a result of pressure from, or incentives offered by, any of the parties;

(b) where the supplier operates an exclusive distribution system, the restriction of the territory into which, or of the customer groups to whom, one or a limited number of buyers, to which an exclusive territory or customer group has been allocated, may actively or passively sell the contract goods or services, except:

(i) the restriction of active sales by the exclusive distributor, or the exclusive distributor and its customers that have entered into a distribution agreement with the supplier or with a party that was given distribution...
rights by the supplier, into a territory or to a customer group reserved to
the supplier or allocated by the supplier exclusively to one or a limited
number of other buyers,

(ii) the restriction of active or passive sales by the exclusive distributor, or
the exclusive distributor and its customers to unauthorised distributors
located in another territory where the supplier operates a selective
distribution system for the contract goods or services,

(iii) the restriction of the exclusive distributor’s place of establishment,

(iv) the restriction of active or passive sales to end users by an exclusive
distributor operating at the wholesale level of trade,

(v) the restriction of the exclusive distributor’s ability to actively or
passively sell components, supplied for the purposes of incorporation to a
product, to customers who would use them to manufacture the same type
of goods as those produced by the supplier.

(c) where the supplier operates a selective distribution system,

(i) the restriction of the territory into which, or of the customer groups to
whom, the members of the selective distribution system may actively or
passively sell the contract goods or services, except:

– the restriction of active sales by the members of the selective
distribution system, or the members of the selective
distribution system and their customers that have entered into
a distribution agreement with the supplier or with a party that
was given distribution rights by the supplier, into another
territory or to a customer group reserved to the supplier or
allocated by the supplier exclusively to one or a limited
number of buyers,

– the restriction of active or passive sales by the members of
the selective distribution system or their customers to
unauthorised distributors located within the territory where
the selective distribution system is operated,

– the restriction of the place of establishment of the members
of the selective distribution system,

– the restriction of active or passive sales to end users by
members of the selective distribution system operating at the
wholesale level of trade,

– the restriction of the ability to actively or passively sell
components, supplied for the purposes of incorporation, to
customers who would use them to manufacture the same type
of goods as those produced by the supplier.

(ii) the restriction of cross-supplies between the members of the selective
distribution system operating at the same or different levels of trade;

(iii) the restriction of active or passive sales to end users by members of the
selective distribution system operating at the retail level of trade, except
in the situation set out in the first hyphen of Article 4(c)(i).
(d) where the supplier operates neither an exclusive nor a selective distribution system, the restriction of the territory into which, or of the customer group to whom, a buyer may actively or passively sell the contract goods or services, except:

(i) the restriction of active sales by the buyer, or the buyer and its customers that have entered into a distribution agreement with the supplier or with a party that was given distribution rights by the supplier, into a territory or to a customer group reserved to the supplier or allocated by the supplier exclusively to one or a limited number of buyers,

(ii) the restriction of active or passive sales by the buyer or its customers to unauthorised distributors located in a territory where the supplier operates a selective distribution system for the contract goods or services,

(iii) the restriction of the buyer’s place of establishment,

(iv) the restriction of active or passive sales to end users by a buyer operating at the wholesale level of trade,

(v) the restriction of the buyer’s ability to actively or passively sell components, supplied for the purposes of incorporation, to customers who would use them to manufacture the same type of goods as those produced by the supplier;

(e) the restriction, agreed between a supplier of components and a buyer who incorporates those components, of the supplier’s ability to sell the components as spare parts to end-users or to repairers, wholesalers or other service providers not entrusted by the buyer with the repair or servicing of its goods.

Article 5

Excluded restrictions

1. The exemption provided for in Article 2 shall not apply to the following obligations contained in vertical agreements:

(a) any direct or indirect non-compete obligation, the duration of which is indefinite or exceeds five years;

(b) any direct or indirect obligation causing the buyer, after termination of the agreement, not to manufacture, purchase, sell or resell goods or services;

(c) any direct or indirect obligation causing the members of a selective distribution system not to sell the brands of particular competing suppliers;

(d) any direct or indirect obligation causing a buyer of online intermediation services not to offer, sell or resell goods or services to end users under more favourable conditions using competing online intermediation services.

2. By way of derogation from paragraph 1(a), the time limitation of five years shall not apply where the contract goods or services are sold by the buyer from premises and land owned by the supplier or leased by the supplier from third parties not connected with the buyer, provided that the duration of the non-compete obligation does not exceed the period of occupancy of the premises and land by the buyer.

3. By way of derogation from paragraph 1(b), the exemption provided for in Article 2 shall apply to any direct or indirect obligation causing the buyer, after termination of
the agreement, not to manufacture, purchase, sell or resell goods or services where the following conditions are fulfilled:

(a) the obligation relates to goods or services which compete with the contract goods or services;
(b) the obligation is limited to the premises and land from which the buyer has operated during the contract period;
(c) the obligation is indispensable to protect know-how transferred by the supplier to the buyer;
(d) the duration of the obligation is limited to a period of one year after termination of the agreement.

Paragraph 1(b) is without prejudice to the possibility of imposing a restriction which is unlimited in time on the use and disclosure of know-how which has not entered the public domain.

Article 6
Non-application of this Regulation

Pursuant to Article 1a of Regulation No 19/65/EEC, the Commission may by regulation declare that, where parallel networks of similar vertical restraints cover more than 50% of a relevant market, this Regulation shall not apply to vertical agreements containing specific restraints relating to that market.

Article 7
Application of the market share threshold

For the purposes of applying the market share thresholds provided for in Article 3 the following rules shall apply:

(a) the market share of the supplier shall be calculated on the basis of market sales value data and the market share of the buyer shall be calculated on the basis of market purchase value data. If market sales value or market purchase value data are not available, estimates based on other reliable market information, including market sales and purchase volumes, may be used to establish the market share of the undertaking concerned;
(b) the market shares shall be calculated on the basis of data relating to the preceding calendar year;
(c) the market share of the supplier shall include any goods or services supplied to vertically integrated distributors for the purposes of sale;
(d) if a market share is initially not more than 30 %, but subsequently rises above that level, the exemption provided for in Article 2 shall continue to apply for a period of two consecutive calendar years following the year in which the 30 % threshold was first exceeded;
(e) the market share held by the undertakings referred to in point (e) of the second subparagraph of Article 1(2) shall be apportioned equally to each undertaking having the rights or the powers listed in point (a) of the second subparagraph of Article 1(2).
**Article 8**

**Application of the turnover threshold**

1. For the purpose of calculating total annual turnover within the meaning of Article 2(2), the turnover achieved during the previous financial year by the relevant party to the vertical agreement and the turnover achieved by its connected undertakings in respect of all goods and services, excluding all taxes and other duties, shall be added together. For this purpose, no account shall be taken of dealings between the party to the vertical agreement and its connected undertakings or between its connected undertakings.

2. The exemption provided for in Article 2 shall remain applicable where, for any period of two consecutive financial years, the total annual turnover threshold is exceeded by no more than 10%.

**Article 9**

**Transitional period**

The prohibition laid down in Article 101(1) of the Treaty shall not apply during the period from 1 June 2022 to 31 May 2023 in respect of agreements already in force on 31 May 2022 which do not satisfy the conditions for exemption provided for in this Regulation but which, on 31 May 2022, satisfied the conditions for exemption provided for in Regulation (EC) No 330/2010.

**Article 10**

**Period of validity**

This Regulation shall enter into force on 1 June 2022.

It shall expire on 31 May 2034.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, […]

*For the Commission*

*The President*

[...]
On 9 July 2021, the Commission published for public consultation a draft revised Vertical Block Exemption Regulation ("VBER").¹ The VBER deals with so-called vertical agreements, namely agreements that relate to the supply and distribution of goods and services. These agreements are ubiquitous across the EU economy. The VBER declares that if such vertical agreements meet certain conditions, the prohibition in Article 101(1) of the Treaty does not apply to them. The draft revised VBER is accompanied by draft revised Guidelines on Vertical Restraints ("Vertical Guidelines")² that provide further guidance on how to interpret and apply the VBER but also on the assessment under Article 101(1) and Article 101(3) of the Treaty of vertical agreements that are not exempted by the VBER.

The purpose of the public consultation is to gather stakeholder feedback on the draft revised VBER and draft revised Vertical Guidelines, and in particular on the changes that the Commission proposes, which are meant to address the issues identified in the evaluation set out in the Commission Staff Working Document published on 8 September 2020.³

The evaluation showed that the VBER and the Vertical Guidelines are useful tools that significantly facilitate the assessment of vertical agreements under Article 101 of the Treaty, and help reduce compliance costs for businesses. However, it also showed room for improvement of the functioning of the VBER and the Vertical Guidelines, notably the need to adapt them to market developments that have occurred since the adoption of the current rules.

Since the launch of the impact assessment phase in October 2020, the Commission has gathered further evidence on the areas for improvement, including through an open public consultation that ran from 18 December 2020 to 26 March 2021, as well as in discussions with stakeholders and national competition authorities. The drafts of the revised VBER and the revised Vertical Guidelines take into account all the evidence collected so far. The public consultation on these drafts forms an integral part of the fact-finding carried out by the Commission. It will inform the impact assessment, on which the final versions of the revised VBER and the revised Vertical Guidelines will be based.

At this stage, the drafts of the revised VBER and the revised Vertical Guidelines include the changes proposed by the Commission based on the evidence gathered so far as summarised in this explanatory note, in line with the following three objectives of the review:

- Readjusting the safe harbour to eliminate false positives and reduce false negatives under the VBER (objective 1);
- Providing stakeholders with up-to-date guidance for a business environment reshaped by the growth of e-commerce and online platforms, and ensuring a more harmonised application of the vertical rules across the European Union (objective 2); and

• Reducing compliance costs for businesses by simplifying complex areas of the current rules and streamlining the existing guidance (objective 3).

1. **Readjusting the safe harbour to eliminate false positives and reduce false negatives under the VBER**

   Through the evaluation, the Commission identified four areas as possibly requiring changes with a view to readjusting the safe harbour provided by the VBER to its intended scope.

   Two of the four areas (dual distribution and parity obligations, which are described in more detail below) concern possible false positives.

   False positives concern vertical agreements and restrictions that are currently covered by the safe harbour of the VBER but for which it cannot be assumed with sufficient certainty that they are generally on balance efficiency enhancing and, thus, fulfil the conditions for an exemption pursuant to Article 101(3) of the Treaty. In case of false positives, the Commission has an obligation to reduce the safe harbour to bring it in line with Article 101 of the Treaty and the Empowerment Regulation.

   The two other areas (active sales restrictions and online restrictions, which are also described in more detail below) concern possible false negatives.

   False negatives refer to vertical agreements and restrictions which are currently not covered by the VBER but for which it can be assumed with sufficient certainty that they generally fulfil, under certain conditions, the requirements for an exemption pursuant to Article 101(3) of the Treaty. Considering that the exclusion of generally exemptible vertical agreements and restrictions from the safe harbour does not result in a breach of Article 101 of the Treaty or the Empowerment Regulation, there is no imperative for the Commission to act. However, excluding generally exemptible vertical agreements from the safe harbour increases the burden, and thus compliance costs, for businesses and notably small and medium-sized enterprises (“SMEs”) when self-assessing the compliance of their agreements with Article 101 of the Treaty. The Commission therefore strives to reduce any such false negatives to the extent possible.

   • **Dual distribution** covers situations in which a supplier not only sells its goods or services through independent distributors but also directly to end customers in direct competition with its independent distributors. The evidence gathered so far during the review of the VBER indicates that the originally rather limited scenarios of dual distribution have become prevalent since the adoption of the currently applicable VBER and Vertical Guidelines. This is notably due to the growth of online sales, which has facilitated direct sales by suppliers, either through their own web-shops or via online marketplaces. As a result, the current exception for dual distribution is likely to exempt vertical agreements where possible horizontal concerns are no longer negligible.

   The proposal provided in Article 2(4) to (7) of the draft revised VBER excludes from the existing safe harbour scenarios of dual distribution that may give rise to horizontal concerns. Article 2(4) of the revised draft VBER limits the current safe harbour for dual distribution to instances where

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the parties’ aggregated market share in the retail market does not exceed 10%, in line with the existing market share threshold for agreements between competitors used in the De Minimis Notice.  

Article 2(5) of the draft revised VBER provides for an additional but more limited safe harbour for dual distribution where the supplier and its distributors have an aggregated market share at retail level above 10% but still do not exceed the 30% market share threshold in Article 3 of the VBER. In such a scenario, to maintain the safe harbour to the extent possible and increase legal certainty for businesses, all aspects of their vertical agreement remain exempted, except for information exchanges between the parties to the vertical agreement. For dual distribution scenarios under Article 2(4) and (5) to benefit from the revised safe harbour, it is also clarified in Article 2(6) of the revised draft VBER that the vertical agreements should not include any by object restrictions under Article 101(1) of the Treaty, nor any hardcore restrictions under Article 4 of the revised VBER.

Further clarifications about the revised scope of the dual distribution exception are provided in the draft revised Vertical Guidelines (see section 4.4.3 of the revised draft Vertical Guidelines), where reference is also made to the Horizontal Guidelines. These Horizontal Guidelines are currently also under review and could in the future provide further guidance on horizontal and vertical information exchanges in situations of dual distribution to further increase legal certainty for businesses.

In addition, the draft revised VBER reflects the proposed change to expand the scope of the dual distribution exception to include wholesalers and importers (see Article 2(4)(a) of the draft revised VBER). However, Article 2(7) of the revised VBER excludes providers of online intermediation services from the benefit of this exception if they have a hybrid function, namely when they sell goods or services in competition with undertakings to which they provide online intermediation services.

- **Parity obligations**, sometimes also referred to as Most Favoured Nation clauses (“MFNs”), can be defined as obligations that require an undertaking to offer the same or better conditions to its contract party as those offered on any other sales/marketing channel (e.g. other platforms) or on the company’s direct sales channel (e.g. own website(s)). All parity clauses are currently block exempted under the VBER, but have been increasingly subject to enforcement actions by competition authorities during the last years.

As these enforcement actions have focused on parity clauses relating to indirect sales channels, the revised draft VBER removes the benefit of the block exemption for such across-platform retail parity obligations imposed by providers of online intermediation services. This type of parity obligation is added to the list of excluded restrictions, see Article 5(d) of the revised draft VBER. The consequence of this proposed change is that this type of parity obligation would have to be assessed individually under Article 101 of the Treaty.

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Conversely, the draft revised VBER still block exempts retail parity obligations relating to direct sales or marketing channels (so-called narrow parity). These narrow retail parity obligations as well as wholesale parity obligations continue to benefit from the safe harbor provided by the VBER, provided the general conditions for the application of the VBER are fulfilled, in particular the 30% market share threshold in Article 3 of the VBER. Further guidance on the assessment of parity obligations is provided in sections 6.2.4 and 8.2.5 of the draft revised Vertical Guidelines.

- **Active sales restrictions** concern limitations of the buyer's ability to actively approach individual customers. The currently applicable rules of the VBER contain only narrow exceptions in which active sales restrictions are allowed. The evidence gathered so far in the review of the VBER and the Vertical Guidelines indicates that these rules are unclear and limit suppliers in designing their distribution systems according to their business needs.

In light of this evidence, Article 1(1)(l) in conjunction with Article 1(1)(n) of the revised draft VBER provide a definition of active sales restrictions. In addition, the draft revised VBER includes proposed changes to the rules on active sales restrictions concerning mostly Article 4(b) to (d) of the revised draft VBER.

In Article 4(b), the possibility of shared exclusivity is introduced, allowing a supplier to appoint more than one exclusive distributor in a particular territory or for a particular customer group. At the same time, the proposed change establishes a link between such shared exclusivity and the efficiency of the exclusive distribution system to ensure that it does not lead to a fragmentation of the single market. To that end, the draft revised Vertical Guidelines clarify that the number of appointed distributors should be determined in proportion to the allocated territory or customer group in such a way as to secure a certain volume of business that preserves their investment efforts.

Another change regarding exclusive distribution concerns the possibility for the supplier to oblige its buyers to pass on to their customers. According to Article 4(b) of the revised draft VBER, such a pass-on is possible where the customer of the buyer has entered into a distribution agreement with the supplier or with a party that was given distribution rights by the supplier. The change aims to enhance the protection of the investment incentives of exclusive distributors.

Furthermore, Article 4(c) of the draft revised VBER grants selective distribution systems enhanced protection from sales by unauthorised distributors located within the selective distribution territory.

- **As regards certain indirect measures restricting online sales**, the proposed changes relate to dual pricing (i.e. charging the same distributor a higher wholesale price for products intended to be sold online than for products to be sold offline) and to the equivalence principle (i.e. imposing criteria for online sales that are not overall equivalent to the criteria imposed on brick-and-mortar shops). The evidence gathered so far in the review of the VBER indicates that online sales have developed into a well-functioning sales channel and therefore no longer needs special protection by qualifying certain indirect measures restricting online sales as hardcore restrictions.

Therefore, Article 4 of the draft revised VBER no longer qualifies dual pricing as a hardcore restriction. Consequently, it allows suppliers to set different wholesale prices for online and offline sales by the same distributor, in so far as this is intended to incentivise or reward an appropriate level of investments and relates to the costs incurred for each channel.
Furthermore, in the context of a selective distribution system, the criteria imposed by suppliers in relation to online sales no longer have to be overall equivalent to the criteria imposed on brick-and-mortar shops, given that both channels are inherently different in nature.

The proposed changes are subject to the same limiting principle as online sales restrictions more generally. Therefore, the proposed revised VBER only block exempts dual pricing and the lack of equivalence if these restrictions do not, directly or indirectly, have as their object to prevent buyers or their customers from using the internet for the purposes of selling their goods or services online.

2. **Provide stakeholders with up-to-date guidance to help businesses to assess their agreements in a business environment reshaped by the growth of e-commerce and online platforms and to ensure a more harmonised application of the vertical rules across the EU**

One of the main objectives of the review is to provide stakeholders with up-to-date guidance on online restrictions and ensure a harmonised approach to such restrictions across the EU. To that end, the draft revised VBER and the draft revised Vertical Guidelines incorporate the guiding principles for the assessment of online restrictions drawn from the case law of the Court of Justice of the EU, namely in *Pierre Fabre* and *Coty*, and relied upon by DG COMP.

Article 1(1)(n) of the draft revised VBER, provides a clear threshold for assessing hardcore restrictions in an environment reshaped by the growth of online sales. Restrictions that, directly or indirectly, in isolation or combination with other factors, have as their object to prevent the buyers or their customers from effectively using the Internet for the purposes of selling their goods or services online or from effectively using one or more online advertising channels are defined as restrictions of active or passive sales, and thus as hardcore restrictions under Article 4 of the VBER.

Section 6.1.2 of the draft revised Vertical Guidelines provides further guidance on such hardcore restrictions. It explains when certain online conduct amounts to active or passive selling. For instance, while the operation of a website is a form of passive selling, translating that website in a language not commonly used in the territory of the distributor is a form of active selling. It also provides that a restriction of the use of price comparison websites, or paid referencing in search engines, amounts to a hardcore restriction under the VBER, as the ability to advertise allows a distributor to attract potential customers to its website, which is a prerequisite for being able to sell online. Conversely, online advertising restrictions that do not exclude specific online advertising channels are block exempted, for example, if such restrictions are linked to the content of online advertising or set certain quality standards. Other updates reflected in the draft revised Vertical Guidelines include the introduction of a section dealing with restrictions of the use of online platforms and price comparison tools (see sections 8.2.3 and 8.2.4).

The draft revised VBER and the draft revised Vertical Guidelines also provide specific rules and guidance relating to the platform economy taking into account that this part of the economy plays an increasingly important role in the distribution of goods and services. Article 1(1)(d) of the revised draft VBER includes a definition of online intermediation services provider, which is based on a

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similar definition in the P2B Regulation. The definition clarifies that online intermediation services providers qualify as suppliers under the VBER. The implications of this clarification and the application of other rules to online intermediation services providers are set out in the Vertical Guidelines (see section 4.3). The relevant guidance also includes an explanation as to why undertakings active in the online platform economy cannot qualify as genuine agents (see section 3.2.3). Furthermore, as mentioned above in the context of the proposed changes to the dual distribution exception, Article 2(7) of the draft revised VBER provides that hybrid online intermediation providers do not benefit from the safe harbour provided by the VBER.

The proposed changes are consistent with the proposal for the Digital Markets Act (“DMA”). This is notably because the focus of the DMA is on digital gatekeepers, which are undertakings that enjoy market power and therefore do not benefit from the safe harbour provided by the VBER.

The draft revised Vertical Guidelines also incorporate the February 2021 Working Paper on distributors that also act as agents for certain products for the same supplier.

In addition, the draft revised VBER aims to ensure a more harmonized application of Article 101 of the Treaty to vertical agreements across the EU. This is to be achieved by incorporating in the VBER itself certain guiding principles, such as those applicable to online sales restrictions, as well as new rules, for example regarding the definition and qualification of online intermediation services providers as suppliers. At the same time, the draft revised Vertical Guidelines aim to strengthen the ability of the national competition authorities to withdraw the benefit of the VBER in individual cases to the extent possible within the existing legal framework by providing guidance on the applicable conditions and procedure (see section 7.1 of the draft revised Vertical Guidelines).

3. Reduce compliance costs for businesses by simplifying the current rules and streamlining the existing guidance

The draft revised VBER and draft revised Vertical guidelines also aim to reduce compliance costs of businesses, notably SMEs, by clarifying certain provisions perceived as particularly complex and thus difficult to implement.

In particular, the provisions on territorial and customer restrictions in Article 4(b) of the current VBER, which stakeholders considered as particularly complex, have been replaced with three distinct sets of provisions clarifying the scope of the prohibition for each of the main distribution systems, namely exclusive distribution, selective distribution and free distribution. In addition, section 4.6 of the draft revised Vertical Guidelines provide a detailed explanation of the characteristics of each of these distribution systems.

Finally, the structure of the draft revised Vertical Guidelines has been simplified to provide a clearer framework of analysis for vertical agreements. For example, the new structure combines the previously scattered guidance on RPM in one dedicated section (see section 6.1.1 of the draft revised Vertical Guidelines).

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ANNEX

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COMMUNICATION FROM THE COMMISSION

Approval of the content of a draft for a

COMMUNICATION FROM THE COMMISSION
COMMISSION NOTICE
Guidelines on vertical restraints
ANNEX
COMMUNICATION FROM THE COMMISSION
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Guidelines on vertical restraints
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COMMISSION NOTICE
Guidelines on Vertical Restraints

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1. **INTRODUCTION**

1.1. **Purpose and structure of these Guidelines**

(1) These Guidelines set out the principles for the assessment of vertical agreements and concerted practices under Article 101 of the Treaty on the Functioning of the European Union (hereinafter “Article 101”), and Commission Regulation (EU) [No [X]/2022 of [X] 2022] on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices (hereinafter “VBER”). For ease of reference, unless otherwise stated, in these Guidelines, the term “agreement” also covers concerted practices.

(2) By issuing these Guidelines, the Commission aims to help companies conduct their own assessment of vertical agreements under the EU competition rules. However, each agreement must be evaluated in the light of its own facts. These Guidelines cannot therefore be applied mechanically. They are also without prejudice to the case-law of the General Court and the Court of Justice of the European Union (hereinafter “CJEU”).

(3) Vertical agreements may be concluded for intermediate and final goods and services. Unless otherwise stated, these Guidelines apply to all types of goods and services, and to all levels of trade.

(4) These Guidelines are structured as follows:

- This first section is an introduction, which includes explanations as to the reasons why and the extent to which the Commission provides guidance on vertical agreements. The remainder of this introduction sets out the context in which Article 101 applies to vertical agreements.

- The second section provides an overview of the positive and negative effects created by vertical agreements. The VBER in its entirety, these Guidelines, and the Commission’s enforcement policy in individual cases are based on the consideration of these effects.

- The third section deals with vertical agreements that generally fall outside Article 101(1). While the VBER does not apply to these agreements, it is necessary to provide guidance on the conditions under which vertical agreements fall outside Article 101(1).

- The fourth section provides further guidance on the scope of the VBER. It includes explanations on the safe harbour established by the VBER and the definition of a vertical agreement. This section also deals more specifically with vertical agreements in relation to the online platform economy, which plays an increasingly important role in the distribution of goods and services and where vertical agreements between undertakings may not be easy to categorise under the concepts traditionally associated with vertical agreements. That section also explains the limits of the application of the VBER, as stipulated in Article 2(2) to (4) VBER, and explains the relationship with other

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2 OJ L, [X], [X],[X],[X], p. [X].
3 The Commission will continue to monitor the operation of the VBER and these Guidelines and may revise this notice in light of future developments.
block exemption regulations pursuant to Article 2(8) VBER. It also contains a description of the main types of distribution systems. This description is relevant for a number of provisions of the VBER, notably the list of hardcore restrictions provided in Article 4(b) VBER.

- The fifth section addresses the definition of the relevant markets and the calculation of the market shares of the undertakings party to a vertical agreement. It serves to assess whether the market share thresholds provided in Article 3 VBER determining the applicability of the VBER are exceeded.

- The sixth section deals with the hardcore restrictions set out in Article 4 VBER and the excluded restrictions set out in Article 5 VBER, including explanations as to why the qualification as hardcore or excluded restriction is relevant.

- The seventh section contains guidance on the withdrawal of the benefit of the VBER pursuant to Article 29 of Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty (hereafter “Regulation 1/2003”) and regulations declaring that the VBER does not apply pursuant to Article 6 VBER.

- The eighth section describes the Commission’s enforcement policy in individual cases. To this end, it explains how vertical agreements are assessed under Article 101(1) and 101(3) outside the scope of the VBER, and provides guidance on a non-exhaustive list of specific vertical agreements.

### 1.2. Applicability of Article 101 to vertical agreements

(5) The objective of Article 101 is to ensure that undertakings do not use agreements, whether horizontal or vertical,\(^5\) to prevent, restrict or distort competition on the market to the ultimate detriment of consumers. Article 101 also pursues the wider objective of achieving an integrated internal market,\(^6\) which enhances competition in the European Union. Undertakings may not use vertical agreements to re-establish private barriers between Member States where State barriers have been successfully abolished.

(6) Article 101 applies to vertical agreements and restrictions in vertical agreements that affect trade between Member States and that prevent, restrict or distort competition.\(^7\) It provides a legal framework for the assessment of vertical restraints,\(^8\) which takes

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\(^5\) For the application of the VBER, Article 1(1)(a) of the VBER defines a ‘vertical agreement’ as “an agreement or concerted practice entered into between two or more undertakings each of which operates, for the purposes of the agreement or the concerted practice, at a different level of the production or distribution chain, and relating to the conditions under which the parties may purchase, sell or resell certain goods or services”. Further guidance on this definition is provided in section 4.2. of these Guidelines.


\(^8\) For the application of the VBER, Article 1(1)(b) of the VBER defines a ‘vertical restraint as “a restriction of competition in a vertical agreement falling within the scope of Article 101(1)’ [emphasis
into consideration the distinction between anti-competitive and pro-competitive effects. Article 101(1) prohibits agreements that appreciably restrict or distort competition, while Article 101(3) exempts those agreements falling within Article 101(1) that provide sufficient benefits to outweigh their anti-competitive effects.\(^9\)

(7) While there is no mandatory sequence for the assessment of vertical agreements, it generally involves the following steps:

(a) First, the undertakings involved need to establish the market shares of the supplier and the buyer on the market where they respectively sell and purchase the contract goods or services.

(b) If the relevant market share of the supplier and the buyer each do not exceed the 30% market share threshold, the vertical agreement is covered by the safe harbour created by the VBER, provided that it contains neither any hardcore restrictions nor any excluded restrictions that cannot be severed from the rest of the vertical agreement.

(c) If the relevant market share is above the 30% threshold for the supplier and/or the buyer, it is necessary to assess whether the vertical agreement falls within Article 101(1).

(d) If the vertical agreement falls within Article 101(1), it is necessary to examine whether it fulfils the conditions for an individual exemption under Article 101(3).

2. **Effects of Vertical Agreements**

(8) The assessment of vertical restraints under Article 101 and the application of the VBER must take into account all relevant parameters of competition, such as prices, output in terms of product quantities, product quality and variety, and innovation. They must also take into account that vertical agreements between undertakings operating at different levels of the production or distribution chain are generally less harmful than horizontal agreements between competitors supplying substitutable goods or services. In principle, this is due to the complementary nature of the activities of the parties to a vertical agreement, which normally implies that pro-competitive actions by one of the undertakings benefit the other party to the agreement, and ultimately consumers. In contrast to horizontal agreements, the parties to a vertical agreement therefore tend to have an incentive to agree on lower prices and higher levels of service, which also benefits consumers. The complementary nature of the activities of the parties to a vertical agreement in placing goods or services on the market also implies that vertical restraints may provide substantial scope for efficiencies, for example by optimising manufacturing or distribution processes and services.

(9) Undertakings with market power may try to use vertical restraints to pursue anti-competitive purposes that ultimately harm consumers. Market power is the ability to maintain prices above competitive levels or to maintain output in terms of product

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\(^9\) Further guidance on vertical agreements that generally fall outside the scope of Article 101(1) is provided in section 3. of these Guidelines.

See Communication from the Commission – Notice – Guidelines on the application of Article 81(3) of the Treaty, OJ C 101, 27.4.2004, p. 97 for the Commission’s general methodology and interpretation of the conditions for applying Article 101(1) and in particular Article 101(3).
quantities, product quality and variety or innovation below competitive levels for a not insignificant period of time. The degree of market power normally required for a finding of an infringement under Article 101(1) is less than the degree of market power required for a finding of dominance under Article 102. However, in view of the complementary nature of the activities of the parties to a vertical agreement, the exercise of market power by an undertaking either upstream or downstream would normally hurt the demand for the contract goods or services by the other undertaking party to the vertical agreement. Undertakings party to a vertical agreement therefore usually have an incentive to prevent the exercise of market power by their contract party.

2.1. Positive effects

(10) Vertical agreements may have positive effects, for example lower prices, the promotion of non-price competition or improved quality of services. Arm’s length dealings between a supplier and a buyer, which determine only the price and the quantity of a transaction, can often lead to a sub-optimal level of investments and sales, as they do not take into account externalities arising from the complementary nature of the activities of the supplier and its distributors. These externalities fall into two categories: vertical externalities and horizontal externalities.

(11) Vertical externalities arise because the decisions and actions taken at different levels of the supply and distribution chain determine aspects of the sale of goods or services, such as price, quality, related services and marketing, which affect not only the undertaking making the decisions but also other undertakings at other levels of the supply and distribution chain. For instance, a distributor may not gain all the benefits of its efforts to increase sales, as some of these benefits may go to the supplier. This is because for every extra unit a distributor sells by lowering its resale price or by increasing its sales efforts, the supplier benefits if its wholesale price exceeds its marginal production costs. Thus, there may be a positive externality bestowed on the supplier by such distributor’s actions. Conversely, there may be situations where, from the supplier’s perspective, the distributor may be pricing too high, and/or making too little sales efforts.

(12) Horizontal externalities may arise between distributors of the same goods or services when a distributor is unable to fully appropriate the benefits of its sales efforts. For instance, demand-enhancing pre-sale services provided by one distributor, such as personalised advice in relation to particular goods or services, may lead to higher sales by competing distributors offering the same goods or services and thus create incentives among distributors to free-ride on costly services provided by others. In an omni-channel distribution environment (online and offline), free-riding can occur in both directions. For example, customers may visit a brick and mortar shop to test goods or services or to obtain other useful information on which they base their decision to purchase, but then order the product online from a different distributor. Conversely, customers may gather information in the pre-purchase phase (including inspiration, information, and evaluation) from an online shop, and then visit a brick and mortar shop, ask for and test particular goods or services based on this

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10 Sometimes referred to as “double marginalisation problem”.

information, and finally purchase offline in a brick and mortar shop. Where such free-riding is possible and where the distributor that provides pre-sales services is unable to fully appropriate the benefits, this may lead to a sub-optimal provision of such services in terms of quantity or quality.

In the presence of such externalities, suppliers have an incentive to control certain aspects of their distributors’ operations. In particular, vertical agreements may allow suppliers to internalise the abovementioned external effects, increase the joint profit of the vertical supply and distribution chain and, under certain circumstances, consumer welfare.

While trying to give a comprehensive overview of the various justifications for vertical restraints, these Guidelines do not claim to be complete or exhaustive. The reasons set out below may justify the application of certain vertical restraints.

(a) The vertical externality issue or double marginalisation problem: The setting of too high of a price by the distributor, not taking into account the effect of its decisions on the supplier, can be avoided by the supplier imposing a maximum resale price on the distributor. To increase the distributor’s sales efforts, the supplier may, for example, use selective distribution or exclusive distribution.

(b) The free-rider problem: Free-riding between buyers may occur at the wholesale or retail level, in particular where it is not possible for the supplier to impose effective promotion or service requirements on all buyers. Free-riding between buyers can only occur on pre-sales services and other promotional activities, but not on after-sales services for which the distributor can charge its customers individually. Pre-sales efforts on which free-riding may occur may be important, for example, when the goods or services are relatively new, technically complex or of a high value, or when the reputation of the goods or services is an important determinant of their demand. Non-compete restrictions can help overcome free-riding between suppliers.

(c) To open up or enter new markets: Where a supplier wishes to enter a new geographic market, for instance by exporting to another country, this may involve special sunk investments by the distributor to establish the brand on the market. In order to persuade a local distributor to make these investments, it may be necessary to provide territorial protection so that the distributor can recoup these investments. This may justify restricting distributors located in other geographic markets from selling on the new market (see also paragraph (167) of these Guidelines). This is a special case of the free-rider problem set out in point b) above.

(d) The certification free-rider issue: In some sectors, certain distributors have a reputation for stocking only quality goods or providing quality services (so-called “premium distributors”). In such a case, selling through those distributors may be crucial, in particular for the successful launch of a new product. If the supplier cannot limit its sales to such premium distributors, it runs the risk of being de-listed. There may, therefore, be justifications for allowing exclusive distribution or selective distribution.

(e) The hold-up problem: Sometimes there are client-specific investments to be made by either the supplier or the buyer, such as investments in special equipment or training. For instance, a component manufacturer may have to build new machines and tools in order to satisfy a particular requirement of one
of its customers. Where such client-specific investments cannot be contracted directly, or where such contracting is incomplete, the undertaking concerned may not be able to commit to make the optimal level of investments from the point of view of the supplier and, once selected by the supplier, the buyer may only engage in sub-optimal investments. Vertical agreements may help remove or alleviate such a commitment problem.

(f) The specific hold-up problem that may arise in the case of the transfer of substantial know-how: The know-how, once provided, cannot be taken back and the provider of the know-how may not want it to be used for or by its competitors. In as far as the know-how was not readily available to the buyer, and it is substantial and indispensable for the operation of the agreement, such a transfer may justify a non-compete restriction, which would normally fall outside Article 101(1) in such cases.

(g) Economies of scale in distribution: To have scale economies exploited and thereby see a lower retail price for its goods or services, the manufacturer may want to concentrate the resale of its goods or services on a limited number of distributors. To do so, it could use exclusive distribution, quantity forcing in the form of a minimum purchasing requirement, selective distribution containing such a requirement or exclusive sourcing.

(h) Uniformity and quality standardisation: A vertical restraint may help create a brand image by imposing a certain measure of uniformity and quality standardisation on the distributors, thereby increasing the attractiveness of the goods or services concerned for finals customer and thereby sales. This applies, for instance, in selective distribution and franchising.

(i) Capital market imperfections: Providers of capital such as banks and equity markets may provide capital sub-optimally when they have imperfect information on the solvency of the borrower or where there is an inadequate basis to secure the loan. The buyer or supplier may have better information and may be able, through an exclusive relationship, to obtain extra security for its investment. Where the supplier provides the loan to the buyer, this may lead to the imposition of a non-compete obligation or quantity forcing on the buyer. Where the buyer provides the loan to the supplier, this may be the reason for imposing exclusive supply or quantity forcing on the supplier.

(15) The nine situations listed in the previous paragraph show that generally vertical agreements are likely to help realise efficiencies and develop new markets, and that this may offset possible negative effects. The case is in general strongest for vertical restraints that help the introduction of new and complex goods or services, or protect relationship-specific investments. A vertical restraint is sometimes necessary for as long as the supplier sells its goods or services to the buyer (see in particular the situations described in (a), (b), (f), (g) and (h) of the previous paragraph).

(16) There is a large degree of substitutability between the different vertical restraints. This means that the same inefficiency problem can be solved by different vertical restraints. For instance, it may be possible to achieve economies of scale in distribution by using exclusive distribution, selective distribution, quantity forcing or exclusive sourcing. However, the negative effects on competition may differ between the various vertical restraints, which plays a role when indispensability is assessed under Article 101(3).
2.2. **Negative effects**

(17) The negative effects on the market which may result from vertical restraints and which EU competition law aims to prevent are notably the following:

(a) Anti-competitive foreclosure of other suppliers or other buyers by raising barriers to entry or expansion;

(b) The softening of competition between the supplier and its competitors and/or the facilitation of (explicit or tacit) collusion among these suppliers, often referred to as the reduction of inter-brand competition.

(c) The softening of competition between the buyer and its competitors or the facilitation of (explicit or tacit) collusion among these buyers. However, a reduction of intra-brand competition (i.e. competition between distributors of the goods or services of the same supplier) is by itself unlikely to lead to negative effects for consumers if inter-brand competition (i.e. competition between distributors of the goods or services of different suppliers) is strong.

(d) The creation of obstacles to market integration, including notably limitations on consumer choice to purchase goods or services in any Member State.

(18) Foreclosure, softening of competition and collusion at the supplier level may harm consumers in particular by increasing the wholesale prices of goods or services (which in turn may lead to higher retail prices), limiting the choice of goods or services, lowering their quality or reducing the level of innovation at the supplier level. Foreclosure, softening of competition and collusion at the distributor level may harm consumers in particular by increasing the retail prices of goods or services, limiting the choice of price-service combinations and distribution formats, lowering the availability and quality of retail services and reducing the level of innovation at the distribution level.

(19) In a market where individual retailers distribute the brand(s) of only one supplier, a reduction of competition between the distributors of the same brand will lead to a reduction of intra-brand competition between these distributors, but may not have a negative effect on competition between distributors in general. In such a case, if inter-brand competition is strong, it is unlikely that a reduction of intra-brand competition will have negative effects for consumers.

(20) Possible negative effects of vertical restraints are reinforced when several suppliers and their buyers organise their trade in a similar way, leading to so-called cumulative effects.

3. **Vertical agreements that generally fall outside the scope of Article 101(1)**

3.1. **Lack of effect on trade, agreements of minor importance and SMEs**

(21) Before addressing the scope of the VBER, its application, and more generally the assessment of vertical agreements under Article 101(1) and 101(3), it is important to...
recall that the VBER applies only to agreements falling within the scope of application of Article 101(1).

(22) Agreements that are not capable of appreciably affecting trade between Member States (lack of effect on trade) or which do not appreciably restrict competition (agreements of minor importance) fall outside the scope of Article 101(1). The Commission has provided guidance on the lack of effect on trade in the Commission Guidelines on the effect on trade concept contained in Articles 81 and 82 of the Treaty (hereinafter “Effect on Trade Guidelines”), and on agreements of minor importance in the Commission Notice on agreements of minor importance which do not appreciably restrict competition under 101(1) of the Treaty on the Functioning of the European Union (hereinafter “De Minimis Notice”). These Guidelines are without prejudice to the Effect on Trade Guidelines and the De Minimis Notice, as well as any future Commission guidance in this respect.

(23) The Effect on Trade Guidelines set out the principles developed by the Union Courts to interpret the effect on trade concept and indicate when agreements are unlikely to be capable of appreciably affecting trade between Member States. They include a negative rebuttable presumption that applies to all agreements within the meaning of Article 101(1) irrespective of the nature of the restrictions included in such agreements, thus applying also to agreements containing hardcore restrictions. According to this presumption, vertical agreements are in principle not capable of appreciably affecting trade between Member States when (i) the aggregate market share of the parties on any relevant market within the Union affected by the agreement does not exceed 5%, and (ii) the aggregate annual Union turnover of the supplier generated with the products covered by the agreement does not exceed EUR 40 million. The Commission may rebut the presumption if an analysis of the characteristics of the agreement and its economic context demonstrates the contrary.

(24) As set out in the De Minimis Notice, vertical agreements entered into by non-competitors are generally considered to fall outside the scope of Article 101(1) if the market share held by each of the parties to the agreement does not exceed 15% on any of the relevant markets affected by the agreement. This general rule is subject to two exceptions. Firstly, as regards hardcore restrictions, Article 101(1) applies irrespective of the parties’ market shares. This is because an agreement that may affect trade between Member States and which has an anti-competitive object may by its nature and independently of any concrete effect constitute an appreciable restriction on competition. Secondly, the 15% market share thresholds are reduced to 5% where, in a relevant market, competition is restricted by the cumulative effect

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14 See judgment in Case C-226/11 Expedia Inc. v Autorité de la concurrence EU:C:2012:795, paragraphs 16 and 17 with further references.
17 Effect on Trade Guidelines, paragraph 50.
18 Effect on Trade Guidelines, paragraph 52.
19 De Minimis Notice, paragraph 8, which also includes a market share threshold for agreements between actual or potential competitors, according to which such agreements do not appreciably restrict competition within the meaning of Article 101(1) if the aggregate market share held by the parties to the agreement does not exceed 10% on any of the relevant markets affected by the agreement.
of parallel networks of agreements. Paragraphs (241) to (243) of these Guidelines deal with cumulative effects in the context of the withdrawal of the benefit of the VBER. The De Minimis Notice clarifies that individual suppliers or distributors with a market share not exceeding 5% are in general not considered to contribute significantly to a cumulative foreclosure effect.22

(25) Furthermore, there is no presumption that vertical agreements concluded by undertakings of which one or more has an individual market share exceeding 15% automatically fall within Article 101(1). Such agreements may still lack an appreciable effect on trade between Member States or they may not constitute an appreciable restriction of competition.23 They therefore need to be assessed in their legal and economic context. These Guidelines include criteria for the individual of such agreements.

(26) In addition, the Commission considers that vertical agreements between small and medium-sized undertakings (hereinafter “SMEs”)24 are rarely capable of appreciably affecting trade between Member States. The Commission also considers that such agreements rarely appreciably restrict competition within the meaning of Article 101(1), unless they include restrictions of competition by object within the meaning of Article 101(1). Therefore, vertical agreements between SMEs generally fall outside the scope of Article 101(1). In cases where such agreements nonetheless meet the conditions for the application of Article 101(1), the Commission will normally refrain from opening proceedings for lack of sufficient interest for the Union, unless the undertakings collectively or individually hold a dominant position in a substantial part of the internal market.

3.2. Agency agreements

3.2.1. Definition of agency agreements

(27) An agent is a legal or physical person entrusted with the power to negotiate and/or conclude contracts on behalf of another person (‘the principal’), either in the agent’s own name or in the name of the principal, for the purchase of goods or services by the principal, or the sale of goods or services supplied by the principal.

(28) In certain circumstances, the relationship between an agent and its principal may be characterised as one in which the agent no longer acts as an independent economic operator. This applies where the agent does not bear any or only insignificant financial or commercial risk associated with the contracts concluded or negotiated on behalf of the principal, as further explained below.25 In that case, the agency agreement falls outside the scope of Article 101(1). The qualification given to their agreement by the parties or by national legislation is not material for the assessment. Since they constitute an exception to the general applicability of Article 101 to agreements between undertakings, the conditions for categorising an agreement as an agency agreement for the purpose of applying Article 101(1) should be interpreted narrowly.

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22 De Minimis Notice, paragraph 8.
There are three types of financial or commercial risk that are material to the categorisation of an agreement as an agency agreement for the purpose of applying Article 101(1).

- First, there are contract-specific risks, which are directly related to the contracts concluded and/or negotiated by the agent on behalf of the principal, such as financing of stocks.

- Second, there are risks related to market-specific investments. These are investments specifically required for the type of activity for which the agent has been appointed by the principal, that is, which are required to enable the agent to conclude and/or negotiate this type of contract. Such investments are usually sunk, which means that upon leaving that particular field of activity the investment cannot be used for other activities or sold other than at a significant loss.

- Third, there are the risks related to other activities undertaken on the same product market, to the extent that the principal requires under the agency relationship that the agent undertakes such activities not as an agent on behalf of the principal, but at its own risk.

For the purposes of applying Article 101(1) TFEU, an agreement will be qualified as a agency agreement if the agent bears no, or only insignificant, risks of the three aforementioned types. The significance of any such risks undertaken by the agent is generally to be assessed by reference to the revenues generated by the agent from providing the agency services rather than by reference to the revenues generated by the sale of the goods or services covered by the agency agreement. However, risks that are related to the activity of providing agency services in general, such as the risk of the agent’s income being dependent upon its success as an agent or general investments in for instance premises or personnel that could be used for any type of activity, are not material to this assessment.

In light of the above, for the purpose of applying Article 101(1), the following list provides examples of features generally found in agency agreements. This is the case where the agent:

(a) does not acquire the property of the goods bought or sold under the agency agreement and does not itself supply the contract services. The fact that the agent may temporarily, for a very brief period of time, acquire the property of the contract goods while selling them on behalf of the principal does not preclude an agency agreement, provided the agent does not incur any costs or risks related to that transfer of property;

(b) does not contribute to the costs relating to the supply/purchase of the contract goods or services, including the costs of transporting the goods. This does not preclude the agent from carrying out the transport service, provided that the costs are covered by the principal;

(c) does not maintain at its own cost or risk stocks of the contract goods, including the costs of financing the stocks and the costs of loss of stocks and can return unsold goods to the principal without charge, unless the agent is liable for fault (for example, by failing to comply with reasonable security measures to avoid loss of stocks);

(d) does not take responsibility for customers’ non-performance of the contract (for instance for non-payments by the customer), with the exception of the loss
of the agent's commission, unless the agent is liable for fault (for example, by failing to comply with reasonable security or anti-theft measures or failing to comply with reasonable measures to report theft to the principal or police or to communicate to the principal all necessary information available to him on the customer's financial reliability);

(e) does not assume responsibility towards customers or other third parties for loss or damage resulting from the supply of the contract goods or services, unless, as agent, it is liable for fault in this respect;

(f) is not, directly or indirectly, obliged to invest in sales promotion, including through contributions to the advertising budget of the principal or to advertising or promotional activities specifically relating to the contract goods or services;

(g) does not make market-specific investments in equipment, premises, training of personnel or advertising specific to the contract goods or services, such as for example the petrol storage tank in the case of petrol retailing, specific software to sell insurance policies in the case of insurance agents, or advertising relating to routes or destinations in the case of travel agents selling flights or hotel accommodation, unless these costs are fully reimbursed by the principal;

(h) does not undertake other activities within the same product market required by the principal under the agency relationship (e.g. the delivery of the goods), unless these activities are fully reimbursed by the principal.

(32) Where the agent incurs one or more of the risks or costs mentioned in paragraphs (28) to (31) of these Guidelines, the agreement between the agent and principal will not be qualified as an agency agreement. The question of risk must be assessed on a case-by-case basis, and with regard to the economic reality of the situation rather than the legal form. For practical reasons, the risk analysis may start with the assessment of the contract-specific risks. If the agent incurs contract-specific risks which are not insignificant, that will be enough to conclude that the agent is an independent distributor. If the agent does not incur contract-specific risks, then it will be necessary to continue the analysis by assessing the risks relating to market-specific investments. Finally, if the agent does not incur any contract-specific risks or any risks relating to market-specific investments, the risks related to other activities required under the agency relationship within the same product market may have to be considered.

(33) A principal may use various methods to reimburse the relevant risks, as long as such methods ensure that the agent bears no, or only insignificant, risks of the types set out in paragraphs (28) to (31) of these Guidelines. For example, a principal may choose to reimburse the precise costs incurred, or it may cover the costs by way of a fixed lump sum, or it may pay the agent a fixed percentage of the revenues from the goods or services sold under the agency agreement. To ensure that all relevant risks are covered, it may be necessary to provide a simple method for the agent to declare and request the reimbursement of any costs exceeding the agreed lump sum or fixed percentage. It may also be necessary for the principal to systematically monitor any changes to the relevant costs and to adapt the lump sum or fixed percentage accordingly. Where the relevant costs are reimbursed by way of a percentage of the price of the products sold under the agency agreement, the principal should also take into account that the agent may incur relevant market-specific investments costs even
where it makes limited or no sales for a certain period of time. Such costs have to be reimbursed by the principal.

(34) An independent distributor of some goods or services of a supplier may also act as an agent for other goods or service of that same supplier, provided that the activities and risks covered by the agency agreement can be effectively delineated (for example because they concern goods or services presenting additional functionalities or new features). For the agreement to be considered an agency agreement for the purpose of applying Article 101, the independent distributor must be genuinely free to enter into the agency agreement (for example the agency relationship must not be de facto imposed by the principal through a threat to terminate or worsen the terms of the distribution relationship) and, as mentioned in paragraphs (28) to (31) of these Guidelines, all relevant risks linked to the sale of the goods or services covered by the agency agreement, including market-specific investments, must be borne by the principal.

(35) Where an agent undertakes other activities for the same or other suppliers at its own risk, there is a risk that the conditions imposed on the agent for its agency activity will influence its incentives and limit its decision-making freedom when it sells products as an independent activity. In particular, there is a risk that the pricing policy of the principal for the products sold under the agency agreement will influence the incentives of the agent/distributor to price independently the products that it sells as an independent distributor. In addition, the combination of agency and independent distribution for the same supplier raises difficulties in distinguishing between investments and costs that relate to the agency function, including market-specific investments, and those only related to the independent activity. In such cases, the assessment of whether an agency relationship meets the conditions set out in paragraphs (28) to (31) of these Guidelines can therefore be particularly complex.26

(36) The risks described in paragraphs (28) to (31) of these Guidelines are of particular concern if the agent undertakes other activities as an independent distributor for the same principal in the same product market. Conversely, those risks are less likely to arise if the other activities the agent undertakes as an independent distributor concern a different product market.27 More generally, the less interchangeable the products are, the less likely are those risks to occur. In product markets comprising products not presenting objectively distinct characteristics, such as higher quality, novel features or additional functions, such delineation appears more difficult and there may therefore be a significant risk of the agent being influenced by the terms of the agency agreement, notably regarding the price setting, for the products it distributes independently.

(37) To identify the market-specific investments to be reimbursed when entering into an agency agreement with one of its independent distributors that is already active on the relevant market, the principal should consider the hypothetical situation of an agent that is not yet active in the relevant market in order to assess which

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27 Judgment of the Court of First Instance (Fifth Chamber) of 15 September 2005, DaimlerChrysler AG v Commission of the European Communities, Case T-325/01, ECLI:EU:T:2005:322, paragraphs 100 and 113.
investments are relevant to the type of activity for which the agent is appointed. The only market-specific investments that the principal would not have to cover would be those that relate exclusively to the sale of differentiated products in the same product market that are not sold under the agency agreement but are distributed independently, by contrast to market-specific investments needed to operate in the relevant product market, which the principal would have to cover in all cases. This is because the agent would not incur the market-specific costs corresponding to the differentiated products if it did not also act as an independent distributor for those products in addition to the products it distributes as an agent, provided that it can operate on the relevant market without selling the former. To the extent that the relevant investments have already been depreciated (e.g. investments in activity-specific furniture), the reimbursement may be adjusted proportionately.

Example of how the costs can be allocated in case of a distributor that also acts as agent for certain products for the same supplier.

An independent distributor sells products A, B and C. Products A and B belong to the same product market, which comprises differentiated products presenting objectively different characteristics. Product C belongs to a different product market.

A supplier of product B generally distributes its products using independent distributors. However, for the distribution of a particular type of the same product, namely product A which features a new functionality, it wishes to use an agency agreement, which it offers to its existing independent distributors in the same product market without de iure or de facto requiring them to enter into this agreement.

For the agency agreement not to fall in the scope of Article 101(1) TFEU and to meet the conditions of paragraphs (28) to (31) of these Guidelines, the principal has to cover all relevant investments to the activity of selling each of products A and B (and not only A products) as they belong to the same product market. For example, all costs incurred to adapt or furnish a shop in order to display and sell products A and B are likely to be market-specific. Similarly, the costs of training personnel in order to sell products A and B and costs related to specific storage equipment, which may be needed for products A and B, are also likely to be market-specific. These relevant investments, which would normally be required for an agent to enter the market and start selling products A and B, should be borne by the principal even if the specific agent is already established on that market as an independent distributor.

However, the principal would not have to cover investments for the sale of product C, which does not belong to the same product market as products A and B. Moreover, in case the sale of product B requires specific investments that are not necessary for the sale of product A (e.g. dedicated furniture or staff training), such investments would not be relevant and would therefore not have to be covered by the principal, provided that a distributor can operate on the relevant market comprising products A and B by selling only product A.

As regards advertising, investments in advertising for the agent’s shop as such (instead of advertising specific to product A) would benefit both the agent’s shop in general as well as the sales of products A, B and C, while only product A is sold under the agency agreement. These costs would therefore be partly relevant for the assessment of the agency agreement, to the extent they relate to the sale of product A which is sold under the agency agreement, while they are also relevant to the general activity of selling products A and B. The cost of an advertising campaign relating exclusively to
products B or C, however, would not be relevant and would therefore not have to be covered by the principal, provided that a distributor can operate on the relevant market selling only product A.

The same principles apply to investments in a website or an online store, since part of these investments would not be relevant, as they would have to be made irrespective of the products sold under the agency agreement. Therefore, general investments in the design of a website would not have to be reimbursed, insofar as the website structure itself could be used to sell products other than those belonging to the relevant product market (e.g. C products or, more generally, products other than A and B). However, investments related to the activity of selling or advertising products in the relevant product market (i.e. both products A and B) on the website would be relevant. Therefore, depending on the level of investment required to advertise and sell A and B products on the website, the principal would have to cover part of the costs of setting up the website or the online store. Any specific investments for advertising or selling product B only would not have to be covered, provided that a distributor can operate on the relevant market selling only product A.

3.2.2. Application of Article 101(1) to agency agreements

Where an agreement meets the conditions to be categorised as an agency agreement for the purpose of applying Article 101(1), the selling or purchasing function of the agent forms part of the principal’s activities. Since the principal bears the commercial and financial risks related to the selling and purchasing of the contract goods or services, all obligations imposed on the agent in relation to the contracts concluded and/or negotiated on behalf of the principal fall outside Article 101(1).

The assumption by the agent of the obligations listed at the end of this paragraph will be considered to form an inherent part of an agency agreement, as these obligations relate to the ability of the principal to determine the scope of the agent’s activity in relation to the contract goods or services. This is essential if the principal is to assume the risks in respect of the contracts concluded and/or negotiated by the agent on the principal’s behalf. Thus, the principal is able to determine the commercial strategy in relation to:

(a) limitations on the territory in which the agent may sell these goods or services;
(b) limitations on the customer groups to whom the agent may sell the contract goods or services; or
(c) the prices and conditions at which the agent must sell or purchase the contract goods or services.

By contrast, where the agent bears one or more of the relevant risks described in paragraphs (28) to (31) of these Guidelines, the agreement between agent and principal does not constitute an agency agreement for the purpose of applying Article 101(1). In that situation, the agent will be treated as an independent undertaking and the agreement between agent and principal will be subject to Article 101(1), like any other vertical agreement. For that reason, Article 1(1)(k) VBER clarifies that an undertaking which, under an agreement falling within Article 101(1), sells goods or services on behalf of another undertaking, is a buyer.

Even if the agent bears no, or only insignificant, risks described in paragraphs (28) to (31) of these Guidelines, it remains a separate undertaking from the principal and therefore the provisions concerning the relationship between the agent and the principal may infringe Article 101(1), irrespective of whether they form part of the
agreement governing the sale or purchase of the contract products or a separate agreement. Such provisions may benefit from the VBER, in particular when the conditions provided in Article 5 VBER are fulfilled, or, outside the VBER, they may satisfy the conditions of Article 101(3) in individual cases, as described in section 8.1.2 of these Guidelines. For instance, agency agreements may contain a provision preventing the principal from appointing other agents in respect of a given type of transaction, customer or territory (exclusive agency provisions) and/or a provision preventing the agent from acting as an agent or distributor of undertakings which compete with the principal (single branding provisions). Exclusive agency provisions will in general not lead to anti-competitive effects. However, single branding provisions and post-term non-compete provisions, which concern inter-brand competition, may infringe Article 101(1) if they contribute to a (cumulative) foreclosure effect on the relevant market where the contract goods or services are sold or purchased (see in particular sections 8.2.1 and 6.2.2 of these Guidelines).

(42) An agency agreement may also fall within the scope of Article 101(1), even if the principal bears all the relevant financial and commercial risks, where it facilitates collusion. That could, for instance, be the case when a number of principals use the same agents while collectively excluding others from using these agents, or when they use the agents to collude on marketing strategy or to exchange sensitive market information between the principals.

(43) In the case of an independent distributor that also acts as an agent for certain goods or service of the same supplier, compliance with the requirements set out in paragraphs (34) to (37) of these Guidelines has to be assessed strictly. This is necessary to avoid a misuse of the agency concept in scenarios where the supplier does not actually become active at the retail level, taking all associated distribution decisions and assuming all related risks in accordance with the principles set out in paragraphs (28) to (31), but rather establishes an easy way to control retail prices for those products that allow high resale margins. Since resale price maintenance is a hardcore restriction under Article 4 VBER, as set out in section 6.1.1 of these Guidelines, the agency concept should not be misused by suppliers to circumvent the application of Article 101(1) TFEU

3.2.3. **Agency and the online platform economy**

(44) Undertakings providing online intermediation services are categorised as suppliers under the VBER (see also paragraphs (60) to (64) of these Guidelines) and can therefore in principle not qualify as agents for the purpose of applying Article 101(1). Moreover, providers of online intermediation services generally act as independent economic operators and not as part of the undertakings of the sellers to which they provide online intermediation services. Strong network effects and other features of the online platform economy can contribute to a significant imbalance in the size and bargaining power of the contract parties and result in a situation where the conditions of sale of the contract goods or services and the commercial strategy are determined by the provider of online intermediation services rather than the sellers of the goods or services that are intermediated. In addition, providers of online intermediation services often serve a very large number of sellers in parallel, which prevents them from effectively forming a part of any of the sellers’ undertakings. In addition, providers of online intermediation services typically make significant market-specific investments, for example, in software, advertising and after-sales services, indicating that these undertakings bear significant financial or commercial
risks associated with the contracts negotiated on behalf of the sellers using their online intermediation services.

3.3. Subcontracting agreements

Subcontracting agreements, as defined in the Commission notice of 18 December 1978 concerning the assessment of certain subcontracting agreements in relation to Article 85(1) of the EEC Treaty (hereinafter “Subcontracting Notice”), generally fall outside the scope of Article 101(1). The Subcontracting Notice remains applicable and includes further guidance on the application of this general rule. In particular, the Subcontracting Notice states that, where a contractor imposes limits on the use of technology or equipment that it provides to a subcontractor, this technology or equipment must be necessary to enable the subcontractor to produce the products concerned. It also clarifies the scope of application of this general rule, in particular that other restrictions imposed on the subcontractor generally fall within the scope of Article 101, such as the obligation not to conduct or exploit its own research and development or not to produce for third parties.

4. SCOPE OF THE VBER

4.1. Safe harbour established by the VBER

The block exemption in Article 2(1) VBER establishes a safe harbour for vertical agreements within the meaning of the VBER, provided the market shares held by the supplier and the buyer in the respectively relevant market(s) do not exceed the thresholds in Article 3 of the VBER (see section 5.2. of these Guidelines) and the agreement does not include hardcore restrictions pursuant to Article 4 of the VBER (see section 6.1. of these Guidelines). This safe harbour applies as long as the benefit of the block exemption has not been withdrawn in a particular case by the Commission or the competition authority of a Member State (hereafter “NCA”) pursuant to Article 29 Regulation 1/2003 (see section 7.1. of these Guidelines).

Article 2(1) VBER also establishes a safe harbour where a supplier uses the same agreement(s) to distribute several types of goods or services. In such a case of portfolio distribution, the VBER applies to the vertical agreement to the extent, and in relation to those goods or services for which, the conditions of the application of the VBER are fulfilled. Conversely, Article 101 applies to the vertical agreements in relation to those goods or services that the VBER does not cover. This means that there is no block exemption pursuant to Article 2(1) VBER but also no presumption of illegality of such agreements.

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28 OJ C 1, 31.1.1979, p. 2, which defines subcontracting agreements as agreements under which one firm, called 'the contractor', whether or not in consequence of a prior order from a third party, entrusts to another, called 'the subcontractor', the manufacture of goods, the supply of services or the performance of work under the contractor's instructions, to be provided to the contractor or performed on his behalf.

29 See paragraph 2 of the Subcontracting Notice, which provides further clarifications in particular on the use of industrial property rights and know-how.

30 See paragraph 3 of the Subcontracting Notice.

31 Above the market share threshold of 30%, there is no presumption that vertical agreements fall within the scope of Article 101(1) or fail to satisfy the conditions of Article 101(3).

32 As regards excluded restrictions and the meaning of Article 5 VBER, see section 6.2. of these Guidelines.
4.2. Definition of vertical agreement

(48) Article 101(1) refers to agreements between undertakings, decisions by associations of undertakings and concerted practices. It makes no distinction as to whether these undertakings operate at the same level or at different levels of the production or distribution chain. Article 101(1) thus applies to both horizontal agreements and concerted practices, as well as vertical agreements and concerted practices.33


(50) In accordance with Articles 1 and 3 Empowerment Regulation, Article 1(1)(a) VBER defines a vertical agreement as “an agreement or concerted practice entered into between two or more undertakings each of which operates, for the purposes of the agreement or the concerted practice, at a different level of the production or distribution chain, and relating to the conditions under which the parties may purchase, sell or resell certain goods or services”.36 This definition reflects at least three main requirements, which are addressed in turn below.

4.2.1. Unilateral conduct falls outside the scope of the VBER

(51) The VBER applies to vertical agreements and concerted practices. It does not apply to unilateral conduct by undertakings. Such unilateral conduct can fall within the scope of Article 102 of the Treaty on the Functioning of the European Union (hereinafter “Article 102”) which prohibits the abuse of a dominant position.37 For there to be an agreement within the meaning of Article 101, it is sufficient that the parties have expressed their joint intention to conduct themselves on the market in a specific way (so-called concurrence of wills). The form in which that intention is expressed is irrelevant as long as it constitutes a faithful expression of the parties’ intention.

(52) If there is no explicit agreement expressing the parties’ concurrence of wills, the Commission has to prove for the purpose of applying Article 101 that the unilateral policy of one party receives the acquiescence of the other party. For vertical agreements, there are two ways in which acquiescence with a specific unilateral policy can be established.

(a) Firstly, explicit acquiescence can be deduced from the powers conferred upon the parties in a general agreement drawn up in advance. If the clauses of such a general agreement provide for or authorise a party to adopt subsequently a specific unilateral policy that is binding on the other party, the acquiescence to that policy by the other party can be established on that basis.38

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33 See judgment in Case 56/65 Technique Minière v Maschinenbau Ulm EU:C:1966:38, p. 240.
34 OJ 36, 6.3.1965, p. 35.
36 As in Article 1(1)(a) VBER, in these Guidelines, the term “vertical agreement” includes vertical concerted practices, unless stated otherwise.
37 Conversely, if a vertical agreement within the meaning of Article 101 exists, the VBER and these Guidelines are without prejudice to the possible parallel application of Article 102 to this vertical agreement.
Secondly, for tacit acquiescence it is necessary to show, firstly, that one party requires explicitly or implicitly the cooperation of the other party for the implementation of its unilateral policy and, secondly, that the other party has complied with that requirement by implementing that unilateral policy in practice. For instance, if after a supplier’s announcement of a unilateral reduction of supplies in order to prevent parallel trade, distributors reduce immediately their orders and stop engaging in parallel trade, then those distributors tacitly acquiesce to the supplier’s unilateral policy. However, this cannot be concluded if the distributors continue to engage in parallel trade or try to find new ways to engage in parallel trade.

For instance, if after a supplier’s announcement of a unilateral reduction of supplies in order to prevent parallel trade, distributors reduce immediately their orders and stop engaging in parallel trade, then those distributors tacitly acquiesce to the supplier’s unilateral policy. However, this cannot be concluded if the distributors continue to engage in parallel trade or try to find new ways to engage in parallel trade.

In light of the above, general sales terms and conditions, even if imposed by one party and accepted tacitly by the other party amount to an agreement for the purposes of the application of Article 101(1) of the Treaty.

**4.2.2. The undertakings operate at different levels of the production or distribution chain**

The VBER applies to agreements or concerted practices between two or more undertakings irrespective of their business model. As final consumers do not operate as undertakings, the VBER does not cover vertical agreements or concerted practices with consumers.

Furthermore, to fall within the definition of Article 1(1)(a) VBER, an agreement must be entered into between undertakings operating, for the purposes of the agreement, at different levels of the production or distribution chain. For example, a vertical agreement exists where one of the undertakings produces a raw material or provides a service, and sells it to another undertaking that uses it as an input. Likewise, a vertical agreement exists, for example, where a manufacturer sells a product to a wholesaler that resells it to a retailer.

As the definition in Article 1(1)(a) VBER refers to the purpose of the specific agreement, the fact that one undertaking party to the agreement is active at more than one level of the supply or distribution chain does not preclude the application of the VBER. However, in case agreements between competing undertakings, Article 2(4) VBER must be taken into account. For guidance on Article 2(4) VBER, see section 4.4.3. of these Guidelines.

**4.2.3. The agreements relate to the purchase, sale or resale of goods or services**

Article 1(1)(a) VBER provides that, to fall within the scope of the VBER, vertical agreements must relate to the conditions under which the supplier and the buyer “may purchase, sell or resell certain goods or services”. In accordance with the general purpose of a block exemption regulation, which is to provide legal certainty, Article 1(1)(a) VBER must be interpreted broadly as applying to all vertical agreements, irrespective of whether they relate to intermediate or final goods or services. Both the goods or services supplied and, in the case of intermediate goods or services, the resulting final goods or services, are considered contract goods or services for the purpose of applying the VBER to the respective agreements.

Vertical agreements in the online platform economy, including those entered into with providers of online intermediation services as referred to in Article 1(1)(d)
VBER, are covered by Article 1(1)(a) VBER. Both the provision of online intermediation services and the goods or services subject to the transactions it facilitates are considered contract goods or services for the purpose of applying the VBER to the agreement on the basis of which online intermediation services are provided and the agreement on the basis of which the intermediated goods or services are supplied.

(59) The VBER does not cover vertical restraints that do not relate to the conditions of purchase, sale and resale of certain contract goods or services. These agreements have to be assessed individually, namely whether they, in the individual case fall within the scope of Article 101(1) and, if so, whether the conditions of Article 101(3) are satisfied. For example, the VBER does not apply to an obligation preventing the parties from carrying out independent research and development, which the parties may have included in their vertical agreement. Another example concerns rent and lease agreements. While the VBER applies to goods sold and purchased for renting to third parties, rent and lease agreements as such are not covered as no good or service is being sold by the supplier to the buyer.

4.3. Vertical agreements in the online platform economy

(60) The online platform economy plays an increasingly important role for the distribution of goods and services. Undertakings active in the online platform economy enable new ways of doing business, some of which are not easy to categorise under the concepts traditionally associated with vertical relationships between suppliers and distributors in the brick and mortar environment.

(61) The VBER categorises undertakings active in the supply and distribution chain as suppliers or buyers. Depending on whether an undertaking falls within one category or the other, the VBER may apply differently, notably in the following areas:

(a) The exemption of non-reciprocal vertical agreements between competitors pursuant to Article 2(4) VBER (see section 4.4 of these Guidelines);
(b) The calculation of market shares for the application of the thresholds stipulated in Article 3(1) VBER (see section 5 of these Guidelines);
(c) The removal of the benefit of the VBER pursuant to Article 4 VBER (see section 6.1 of these Guidelines); and
(d) The exclusion of certain restrictions from the safe harbour provided by the VBER pursuant to Article 5 VBER (see section 6.2 of these Guidelines).

(62) The VBER includes definitions of the concepts of supplier, namely Article 1(1)(d) VBER, and buyer, namely Article 1(1)(j) VBER. To reconcile the difficulty of defining these concepts exhaustively with the objective of the VBER of providing as much legal certainty as possible, these provisions are limited to clarifying that certain types of undertakings fall within one or the other category.

(63) Article 1(1)(d) VBER stipulates that an undertaking which provides online intermediation services qualifies as a supplier under the VBER. This means that, in accordance with the distinction between suppliers and buyers provided by the VBER, the undertaking cannot qualify simultaneously as a buyer within the meaning of Article 1(1)(j) VBER in relation to the transaction that it facilitates. Furthermore, it is clarified in Article 1(1)(d) VBER that a provider of online intermediation services is a supplier under the VBER including where it is party to a transaction that it facilitates. This means that, where an undertaking provides online intermediation
services and therefore falls within the scope of the definition provided in Article 1(1)(d) VBER, this undertaking cannot circumvent its qualification as supplier in relation to the online intermediation services provided, for example by becoming a party to the transaction it facilitates or stipulating contractually that it is a buyer of the goods or services supplied on the basis of such a transaction.

(64) The definition of supplier of online intermediation services in Article 1(1)(d) VBER is based on definitions in Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services (hereafter “P2B Regulation”). It builds on the notion that an undertaking providing online intermediation services provides such services with a view to facilitating direct transactions between sellers and buyers, or between sellers and consumers using its online intermediation services. Article 1(1)(d) VBER is based on the consideration that a provider of online intermediation services generally provides an infrastructure that allows undertakings to meet and transact with other undertakings or consumers online, without being legally or factually responsible for their transactions.

4.4. Limits to the application of the VBER

4.4.1. Associations of retailers

(65) Article 2(2) of the VBER includes in the scope of application of the VBER vertical agreements entered into by an association of undertakings which fulfils certain conditions, thereby excluding from the safe harbour vertical agreements entered into by all other associations. This means that vertical agreements entered into between an association and individual members, or between an association and individual suppliers, are covered by the VBER only if all the members are retailers, selling goods (and not services) to final consumers, and if each individual member of the association has an annual turnover not exceeding EUR 50 million. However, where only a limited number of the members of the association have an annual turnover exceeding the EUR 50 million threshold and where these members together represent less than 15% of the collective turnover of all the members combined, this will not normally change the assessment under Article 101.

(66) An association of undertakings may involve both horizontal and vertical agreements. The horizontal agreements must be assessed according to the principles set out in the Guidelines on the applicability of Article 101 of the Treaty to horizontal cooperation agreements (hereinafter “Horizontal Guidelines”). If that assessment leads to the conclusion that a cooperation between undertakings in the area of purchasing or selling is acceptable, because it meets the specific conditions laid down in those Guidelines relating to purchasing and/or commercialisation agreements, a further assessment will be necessary to examine the vertical agreements concluded by the association with individual suppliers or individual members according to the rules of the VBER, in particular the conditions laid down in Articles 3 to 5, and these Guidelines. For instance, horizontal agreements concluded between the members of

42 The annual turnover ceiling of EUR 50 million is based on the turnover ceiling for SMEs in Article 2 of the Annex to the Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises, OJ L124, 20.5.2003, p. 39.
the association or decisions adopted by the association, such as the decision to require the members to purchase from the association or the decision to allocate exclusive territories to the members must first be assessed as a horizontal agreement. Only if that assessment leads to the conclusion that the horizontal agreement is not anti-competitive is it necessary to assess the vertical agreements between the association and individual members or between the association and individual suppliers.

4.4.2. Vertical agreements containing provisions on intellectual property rights (IPRs)

(67) Article 2(3) VBER provides that vertical agreements containing certain provisions which relate to the assignment or use of IPRs can fall within the scope of application of the VBER. Conversely, Article 2(3) VBER excludes all other vertical agreements containing IPR provisions from the scope of application of the VBER.

(68) The VBER applies to vertical agreements containing IPR provisions where five conditions are fulfilled:

(a) The IPR provisions must be part of a vertical agreement, that is, an agreement with conditions under which the parties may purchase, sell or resell certain goods or services;
(b) The IPRs must be assigned to or licensed for use by the buyer;
(c) The IPR provisions must not constitute the primary object of the agreement;
(d) The IPR provisions must be directly related to the use, sale or resale of goods or services by the buyer or its customers. In the case of franchising where marketing forms the object of the exploitation of the IPRs, the goods or services are distributed by the master franchisee or the franchisees; and
(e) The IPR provisions, in relation to the contract goods or services, must not contain restrictions of competition having the same object as vertical restraints that are not exempted under the VBER.

(69) Such conditions ensure that the VBER applies to vertical agreements where the use, sale or resale of goods or services can be performed more effectively because IPRs are assigned to or licensed for use by the buyer. This means that restrictions concerning the assignment or use of IPRs can be covered by the VBER when the main object of the agreement is the purchase or distribution of goods or services.

(70) The first condition makes clear that the context in which the IPRs are provided is an agreement to purchase or distribute goods, or an agreement to purchase or provide services, and not an agreement concerning the assignment or licensing of IPRs for the manufacture of goods, nor a pure licensing agreement. The VBER does not cover for instance:

(a) agreements where a party provides another party with a recipe and licenses the other party to produce a drink with this recipe;
(b) agreements under which one party provides another party with a mould or master copy and licenses the other party to produce and distribute copies;
(c) the pure licence of a trade mark or sign for the purposes of merchandising;
(d) sponsorship contracts concerning the right to advertise oneself as being an official sponsor of an event;
(e) copyright licensing such as broadcasting contracts concerning the right to record and/or broadcast an event.

(71) The second condition makes clear that the VBER does not apply when the buyer provides the IPRs to the supplier, no matter whether the IPRs concern the manner of manufacture or of distribution. An agreement relating to the transfer of IPRs to the supplier and containing possible restrictions on the sales made by the supplier is not covered by the VBER. That means in particular that subcontracting involving the transfer of know-how to a subcontractor does not fall within the scope of application of the VBER (see also section 3.3 these Guidelines). However, vertical agreements under which the buyer provides only specifications to the supplier which describe the goods or services to be supplied fall within the scope of application of the VBER.

(72) The third condition makes clear that in order to be covered by the VBER, the primary object of the agreement must not be the assignment or licensing of IPRs. The primary object must be the purchase, sale or resale of goods or services and the IPR provisions must serve the implementation of the vertical agreement.

(73) The fourth condition requires that the IPR provisions facilitate the use, sale or resale of goods or services by the buyer or its customers. The goods or services for use or resale are usually supplied by the licensor, but may also be purchased by the licensee from a third party supplier. The IPR provisions will normally concern the marketing of goods or services. An example would be a franchise agreement where the franchisor sells goods for resale to the franchisee and licenses the franchisee to use its trade mark and know-how to market the goods or where the supplier of a concentrated extract licenses the buyer to dilute and bottle the extract before selling it as a drink.

(74) The fifth condition highlights the fact that the IPR provisions should not have the same object as any of the hardcore restrictions listed in Article 4 VBER or any of the restrictions excluded from the coverage of the VBER pursuant to Article 5 VBER (see section 6 of these Guidelines).

(75) IPRs relevant to the implementation of vertical agreements within the meaning of Article 2(3) VBER generally concern three main areas: trademarks, copyright and know-how.

4.4.2.1. Trademarks

(76) A trademark licence to a distributor may be related to the distribution of the licensor’s products in a particular territory. If it is an exclusive licence, the agreement amounts to exclusive distribution.

4.4.2.2. Copyright

(77) Resellers of goods or services covered by copyright (e.g. books and software) may be obliged by the copyright holder to only resell under the condition that the buyer, irrespective of whether it is another reseller or the end user, shall not infringe the copyright. Such obligations on the reseller, to the extent that they fall under Article 101(1) at all, are covered by the VBER.

(78) Agreements under which hard copies of software are supplied for resale and the reseller does not acquire a licence to any rights over the software but only has the right to resell the hard copies are to be regarded as agreements for the supply of goods for resale for the purpose of the VBER. Under that form of distribution, licensing the software only occurs between the copyright owner and the user of the
software. It may take the form of a “shrink wrap” licence, that is, a set of conditions included in the package of the hard copy which the end user is deemed to accept by opening the package.

(79) Buyers of hardware incorporating software protected by copyright may be obliged by the copyright holder not to infringe the copyright and must therefore not make copies and resell the software or make copies and use the software in combination with other hardware. Such use restrictions, to the extent that they fall within Article 101(1) at all, are covered by the VBER.

4.4.2.3. Know-how

(80) Franchise agreements, with the exception of industrial franchise agreements, are the most obvious example of know-how for marketing purposes being communicated to the buyer. Franchise agreements contain licences of IPRs relating to trademarks or signs, and know-how for the use and distribution of goods or the provision of services. In addition to the licence of IPRs, the franchisor usually provides the franchisee during the duration of the agreement with commercial or technical assistance, such as procurement services, training, advice on real estate and financial planning. The licence and the assistance provided are integral components of the business method being franchised.

(81) Licensing contained in franchise agreements is covered by the VBER where all five conditions listed in paragraph (70) of the Guidelines are met. Those conditions are usually fulfilled as under most franchise agreements, including master franchise agreements, the franchisor provides goods or services, in particular commercial or technical assistance services, to the franchisee. The IPRs help the franchisee to resell the products supplied by the franchisor or by a supplier designated by the franchisor, or to use those products and sell the resulting goods or services. Where the franchise agreement only or primarily concerns licensing of IPRs, it is not covered by the VBER, but the Commission will, as a general rule, apply the principles set out in the VBER and these Guidelines to such an agreement.

(82) The following IPR-related obligations are generally considered necessary to protect the franchisor’s IPRs and are, where these obligations fall under Article 101(1), also covered by the VBER:

(a) an obligation on the franchisee not to engage, directly or indirectly, in any similar business;

(b) an obligation on the franchisee not to acquire financial interests in the capital of a competing undertaking so as to give the franchisee the power to influence the economic conduct of such undertaking;

(c) an obligation on the franchisee not to disclose to third parties the know-how provided by the franchisor as long as this know-how is not in the public domain;

(d) an obligation on the franchisee to communicate to the franchisor any experience gained in exploiting the franchise and to grant the franchisor and other franchisees a non-exclusive licence for the know-how resulting from that experience;

44 Paragraphs 43-45 apply by analogy to other types of distribution agreements that involve the transfer of substantial know-how from the supplier to the buyer.
(e) an obligation on the franchisee to inform the franchisor of infringements of licensed IPRs, to take legal action against infringers or to assist the franchisor in any legal actions against infringers;

(f) an obligation on the franchisee not to use know-how licensed by the franchisor for purposes other than the exploitation of the franchise;

(g) an obligation on the franchisee not to assign the rights and obligations under the franchise agreement without the franchisor’s consent.

4.4.3. Vertical agreements between competitors

(83) Whereas pursuant to Article 2(8) VBER, on which guidance is provided in section 4.5 of these Guidelines, the VBER does not apply to vertical agreements if their subject matter falls within the scope of any other block exemption regulation, unless otherwise provided for in such a regulation, the first sentence of Article 2(4) VBER also explicitly excludes vertical agreements entered into between competing undertakings from the scope of application of the VBER, unless the vertical agreements fall within the scope of the exceptions in Article 2(4)(a) and 2(4)(b) VBER. Thus, vertical agreements between competitors that are excluded from the scope of the VBER have to be assessed by reference to the Horizontal Guidelines, including the guidance on the exchange of information in the context of vertical agreements between competing undertakings. Where a vertical agreement falls within the scope of an exception in Article 2(4)(a) or (b) VBER and does not include a horizontal restriction of competition by object, this agreement has to be assessed only by reference to these Guidelines.

(84) Article 1(1)(c) VBER defines a competing undertaking as an actual or potential competitor. Two companies are treated as actual competitors if they are active on the same relevant (product and geographic) market. A company is treated as a potential competitor of another company if, absent the agreement, in case of a small but permanent increase in relative prices, it is likely that the former would, within a short period of time normally not longer than one year, undertake the necessary additional investments or incur other necessary switching costs to enter the relevant market on which the other company is active. This assessment must be based on realistic grounds, having regard to the structure of the market and the economic and legal context within which it operates. This means that the mere theoretical possibility of entering a market is not sufficient. There must be real and concrete possibilities for that undertaking to enter the market without any insurmountable barriers to entry. Conversely, there is no need to demonstrate with certainty that that undertaking will in fact enter the market concerned and, a fortiori, that it will be capable, thereafter, of retaining its place there.45

(85) A distributor that provides specifications to a manufacturer to produce particular goods under the distributor’s brand name is not to be considered a manufacturer of such own-brand goods and thus a competitor of the manufacturer. Consequently, the

exemption in Article 2(1) VBER applies to agreements between a distributor selling such own-brand goods manufactured by a third party and a supplier of branded goods on the same relevant market. In contrast, distributors that produce goods in-house under their brand name are considered manufacturers. This means that the exemption in Article 2(1) VBER does not apply to agreements between those distributors and suppliers of branded goods in the same relevant market. Such agreements must therefore be assessed under the Horizontal Guidelines.

(86) The second sentence in Article 2(4) VBER contains two exceptions to the general rule that vertical agreements between competitors are excluded from the safe harbour provided by the VBER. Both exceptions, namely Article 2(4)(a) and (b) VBER, concern dual distribution agreements between a supplier of goods or services also active on the retail market and its distributors. These are typically scenarios where the supplier is mainly active on the upstream market and has limited ancillary activities in the retail market. In cases where the aggregate market share of the supplier and the buyer in the relevant market at retail level does not exceed [10]%, horizontal concerns are unlikely to arise and any potential impact on horizontal competition between the parties at the retail level is considered of lesser importance than the potential impact of the parties’ vertical agreement on general competition at the supply or distribution level.

(87) Therefore, a vertical agreement between competitors falling under Article 2(4)(a) and (b) VBER is block exempted pursuant to Article 2(1) VBER if the following conditions are fulfilled:

(a) the subject matter of the agreement does not fall within the scope of another block exemption regulation, as set out in Article 2(8) VBER;

(b) the supplier’s and the buyer’s aggregate market share in the relevant market at retail level does not exceed [10]%, thus not appreciably restricting competition within the meaning of Article 101(1),46 and the agreement does not contain hardcore restrictions pursuant to Article 4 VBER;

(c) the conditions of Article 2(4)(a) or (b) VBER are fulfilled; and

(d) the agreement does not include horizontal restrictions of competition by object, as set out in Article 2(6) VBER.

This exemption relates to all aspects of the non-reciprocal vertical agreement and any horizontal restrictions by effect, including those resulting from the exchange of information between the competing undertakings. Horizontal restrictions of competition by object are not covered by the exceptions of Article 2(4)(a) or (b).47 Whether an agreement can be considered a dual distribution agreement for the purpose of applying Article 2(4)(a) or (b) VBER should be interpreted narrowly due to the exceptional nature of this provision.

(88) The exception provided by Article 2(4)(a) VBER concerns situations where the supplier is either a manufacturer, wholesaler or importer and is also a distributor of goods, while the buyer is only a distributor that does not compete with the manufacturer at the upstream level.

46 De Minimis Notice, paragraph 8.
47 See judgement of the Court, Expedia Inc. v Autorité de la concurrence and Others, ECLI:EU:C:2012:795, paragraph 37.
The exception provided by Article 2(4)(b) VBER concerns situations where the supplier is a provider of services operating at several levels of trade, while the buyer only operates at the retail level and does not compete with the supplier at the level of trade where it purchases the contract services.

Article 2(5) VBER provides that a vertical agreement between competing undertakings whose aggregate market share at retail level exceeds 10% is still block exempted pursuant to Article 2(1) VBER if the following conditions are fulfilled:

(a) the subject matter of the agreement does not fall within the scope of another block exemption regulation, as set out in Article 2(8) VBER;
(b) the market share threshold of Article 3 VBER is complied with and the agreement does not contain hardcore restrictions pursuant to Article 4 VBER;
(c) the conditions of Article 2(4)(a) or (b) VBER are fulfilled;
(d) any exchange of information between the parties is compatible with the relevant chapter of the Horizontal Guidelines dealing with the competitive assessment of the exchange of information; and
(e) the agreement does not include horizontal restrictions of competition by object, as set out in Article 2(6) VBER.

Article 2(7) VBER provides that suppliers of online intermediation services within the meaning of Article 1(1)(d) VBER that have a hybrid function, namely where they provide online intermediation services and sell goods or services in competition with undertakings to which they provide such services, cannot benefit from the exceptions for dual distribution. As the retail activities of suppliers of online intermediation services that have such a hybrid function typically raise non-negligible horizontal concerns, they do not fulfil the rationale of the dual distribution exception, which in any case must be interpreted narrowly. For the same reason, any restriction regarding the extent to which or the conditions under which online intermediation services can be provided to third parties shall not be covered by the VBER. This does not only apply to restrictions that are stipulated in an agreement with a buyer of online intermediation services, but also to agreements regarding the purchase of the goods or services sold by the provider of online intermediation services that has a hybrid function.

Vertical agreements with hybrid online intermediation services providers must be assessed on a case-by-case basis, notably by reference to both these Guidelines (see section 8 of these Guidelines) and the Horizontal Guidelines. This assessment must cover all aspects of relationships between providers of online intermediation services that have a hybrid function and the undertakings to which they provide online intermediation services, including for instance any exchange of information between them.

4.5. Relationship with other block exemption regulations

As explained in sections 4.1 and 4.2 of these Guidelines, the VBER applies to agreements between undertakings operating at a different level of the production or distribution chain and relating to the conditions under which the parties may purchase, sell or resell certain goods or services. Such vertical agreements are exclusively assessed under the VBER and these Guidelines, irrespective of the outcome of such assessment. They will benefit from the safe harbour established by
the VBER if the market shares thresholds are not exceeded and the agreements do not contain any hardcore restrictions.

(94) However, Article 2(8) VBER states that the VBER does “not apply to vertical agreements the subject matter of which falls within the scope of any other block exemption regulation, unless otherwise provided for in such a regulation”. It is therefore important to verify from the outset if a vertical agreement falls within the scope of application of any other block exemption regulation. For example, as set out in Article 2(4) VBER, vertical agreements concluded between competing undertakings are in principle excluded from the scope of the VBER and have to be assessed under the rules applicable to horizontal agreements. Article 2(4)(a) and (b) VBER provide exceptions to this principle, which must be read in conjunction with Article 2(5) VBER in case the market share threshold of Article 2(4)(a) and (b) VBER is exceeded but the market share threshold of Article 3 VBER is not exceeded. These provisions take into account that the effects that dual distribution agreements have on the market and the possible competition concerns can be similar to horizontal agreements.

(95) Therefore, the VBER does not apply to vertical agreements covered by the following block exemption regulations or any future block exemption regulations relating to the types of agreements mentioned in the following sub-paragraphs, unless otherwise provided for in the respective regulation:

- Commission Regulation (EU) No 316/2014 of 21 March 2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements;\(^\text{48}\)
- Commission Regulation (EU) No 1217/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of research and development agreements;\(^\text{49}\)
- Commission Regulation (EU) No 1218/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of specialisation agreements.\(^\text{50}\)

(96) The VBER does also not apply to the types of agreements between competitors mentioned in the Horizontal Guidelines, unless otherwise provided for in the relevant chapter of the Horizontal Guidelines.

(97) The VBER applies to vertical agreements relating to the purchase, sale or resale of spare parts for motor vehicles and to the provision of repair and maintenance services for motor vehicles. Such agreements only benefit from the VBER if, in addition to the conditions for exemption set out in the VBER, they comply with the additional requirements of Commission Regulation (EU) No 461/2010 of 27 May 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices in the motor vehicle sector, and its accompanying guidelines.

\(^{48}\) OJ L 93, 28.3.2014, p. 17.
\(^{49}\) OJ L 335, 18.12.2010, p. 36.
\(^{50}\) OJ L 335, 18.12.2010, p. 43.
4.6. Main types of distribution systems

(98) A supplier is free to set up its distribution system as it sees fit. The supplier can, for instance, choose vertical integration, which implies selling its goods or services directly to end users or distributing them through its vertically integrated distributors, which are connected undertakings within the meaning of Article 1(2) VBER. Such a distribution system only concerns the organisation inside one specific undertaking and thus falls outside the scope of Article 101(1).

(99) The supplier can also decide to appoint independent distributors. To that end, the supplier may set up one or a combination of other distribution systems. The most common are exclusive distribution, selective distribution and franchising. Since the vertical agreements required to set up such distribution systems are concluded between independent undertakings, they can fall within the scope of Article 101(1) and benefit from the VBER or an individual exemption under Article 101(3), provided that the respective conditions are fulfilled.

4.6.1. Exclusive distribution systems

4.6.1.1. Definition of exclusive distribution systems

(100) In an exclusive distribution system, the supplier allocates a territory or customer group exclusively to one or a limited number of buyers and/or reserves it to itself, while restricting its other buyers within the Union from actively selling into the exclusive territory or to the exclusive customer group.51

(101) Suppliers often use this type of system to incentivise distributors to make the financial and non-financial investments needed to develop their brand in a territory where it is not well-known or to sell a new product in a particular territory or to a particular customer group or to increase the focus of the distributors’ activities on a particular product (e.g. special marketing or display efforts). As for distributors, through the size of the territory or the customer group exclusively allocated and the protection provided by exclusivity, they seek to secure a certain volume of business and a margin that justifies their investment efforts.

(102) In line with this rationale, the number of exclusive distributors should be restricted to one or a limited number (i.e. shared exclusivity) for a particular territory or customer group. Exclusive distribution shall not be used to shield a large number of distributors from competition located outside the exclusive territory, as this would lead to partition of the internal market. To that end, the number of appointed distributors should be determined in proportion to the allocated territory or customer group in such a way as to secure a certain volume of business that preserves their investment efforts.

(103) The appointed distributors are protected from active sales into the exclusive territory or to the exclusive customer group by other buyers from the supplier. When a supplier allocates an exclusive territory or customer group to more than one distributor, all these distributors benefit from the same protection against active sales from other buyers, while active and passive sales between these distributors cannot be restricted.

(104) The vertical agreements used for exclusive distribution should define the scope of the territory or the customer group exclusively allocated to the distributors. The

51 See Article 1(1)(g) VBER.
exclusive territory may cover the territory of a Member State or an area that is smaller or larger in size. The exclusive customer group can be defined, for instance, by the occupation of the customers or through a list of specific customers selected on the basis of one or more objective criteria. Depending on those criteria, the customer group may be limited to a single customer.

(105) When a territory or a customer group has not yet been exclusively allocated to one or more distributors, the supplier can reserve such a territory or customer group for itself and should inform its other distributors. This does not require the supplier to be commercially active in the reserved territory or towards the reserved customer group since the supplier may wish to reserve them for the purpose of allocating them to other distributors in the future.

4.6.1.2. Application of Article 101 to exclusive distribution systems

(106) In a distribution system where the supplier exclusively allocates a territory or a customer group to one or more buyers, the main possible competition risks are market partitioning, which may facilitate price discrimination, and reduced intra-brand competition, in particular in the context of sole exclusivity. When most, all, or the strongest of the suppliers active in a market operate an exclusive distribution system, this may also soften inter-brand competition and facilitate collusion, both at the supplier and the distribution level. Lastly, exclusive distribution may lead to the foreclosure of other distributors and thereby reduce intra-brand competition at the distribution level.

(107) Exclusive distribution agreements are exempted by the VBER where both the supplier's and the buyer's market share each do not exceed 30% and where they do not contain any hardcore restrictions. An exclusive distribution agreement can still benefit from the safe harbour provided by the VBER if combined with other non-hardcore vertical restraints, such as a non-compete obligation limited to five years, quantity forcing or exclusive purchasing. However, where the number of exclusive distributors is not limited and determined in proportion to the allocated territory or customer group in such a way as to secure a certain volume of business that preserves their investment efforts, such a distribution system is unlikely to bring about efficiency-enhancing effects. Where appreciable anti-competitive effects occur, the benefit of the VBER is likely to be withdrawn.

(108) The remainder of this section provides guidance for the assessment of exclusive distribution agreements in individual cases above the 30% market share threshold.

(109) The number of distributors to which a territory or a customer groups has been exclusively allocated is important for the assessment of the exclusive distribution system. The higher the number of distributors, the lower the reduction of intra-brand competition is but also the lower the likelihood that the exclusive distributors have an incentive to invest in order to develop that brand and promote the product(s) of the supplier.

(110) The market position of the supplier and its competitors is of major importance, as the loss of intra-brand competition will only be problematic if inter-brand competition is limited. The stronger the position of the supplier, notably above the 30% threshold, the higher the likelihood that inter-brand competition is weak and the greater the risk for competition resulting from the reduction in intra-brand competition.

(111) The position of the supplier’s competitors can have a dual significance. The existence of strong competitors will generally indicate that any reduction in intra-
brand competition, which can be particularly important in the context of sole distribution, is outweighed by sufficient inter-brand competition. However, if the number of suppliers in a market is rather limited and their market position is rather similar in terms of market share, capacity and distribution network, there is a risk of collusion and/or softening of competition. The loss of intra-brand competition can increase that risk, especially when several suppliers operate similar distribution systems. Multiple exclusive dealerships, that is, when multiple suppliers appoint the same exclusive distributor(s) in a given territory, may further increase the risk of collusion and/or softening of competition both at supplier and distributor level. If one or more distributors are granted the exclusive right to distribute two or more important competing products in the same territory, inter-brand competition may be substantially restricted for those brands, especially in the case of linear wholesale tariffs. The higher the cumulative market share of the brands distributed by the exclusive multiple brand distributors, the higher the risk of collusion and/or softening of competition and the more inter-brand competition will be reduced. If one or more retailers are the exclusive distributor for a number of brands, there is a risk that the reduction of the wholesale price by one supplier for its brand will not be passed on by any exclusive retailers to the final consumer, as it would reduce the retailers’ sales and profits made with the other brands. Hence, compared to the situation without multiple exclusive dealerships, suppliers will have a reduced incentive to enter into price competition with one another. Such cumulative effects situations may be a reason to withdraw the benefit of the VBER where the market shares of the suppliers and buyers are below the 30% threshold of the VBER.

(112) Entry barriers that may hinder suppliers from creating their own integrated distribution network or finding alternative distributors are less important in assessing the possible anti-competitive effects of exclusive distribution, especially in the context of shared exclusivity. Foreclosure of other suppliers does not arise as long as exclusive distribution is not combined with single branding, which obliges or induces the distributor to concentrate its orders for a particular type of product with one supplier. Although single branding does not require the distributor to purchase the products from the supplier itself, the combination of exclusive distribution and single branding can make it more difficult for other suppliers to find alternative distributors.

(113) Foreclosure of other distributors is not an issue where the supplier operating the exclusive distribution system appoints a large number of exclusive distributors on the same market and those exclusive distributors are not restricted in selling to other non-appointed distributors. Foreclosure of other distributors may however be problematic where there is market power downstream, in particular in the case of very large territories where an exclusive distributor becomes the exclusive buyer for a whole market. An example would be a supermarket chain, which becomes the only distributor of a leading brand on a national food retail market. The foreclosure of other distributors may be aggravated in the case of multiple exclusive dealerships.

(114) Buyer power may also increase the risk of collusion on the buyer side when the exclusive distribution arrangements are imposed by important buyers, possibly located in the same or different territories, on one or several suppliers.

(115) Assessing the dynamics of the market is important as growing demand, changing technologies and changing market positions may make negative effects less likely than in mature markets.
The level of trade is important as possible negative effects may differ between the wholesale and retail level. Exclusive distribution is mainly applied in the distribution of final goods or services. A loss of intra-brand competition is especially likely at the retail level if coupled with large territories, since final consumers may be confronted with little possibility of choosing between a high price/high service and a low price/low service distributor for an important brand.

A manufacturer that chooses a wholesaler as its exclusive distributor will normally do so for a larger territory, such as a whole Member State. As long as the wholesaler can sell the products without limitation to downstream retailers, appreciable anti-competitive effects are unlikely. A possible loss of intra-brand competition at the wholesale level may be easily outweighed by efficiencies obtained in logistics and promotion, especially when the manufacturer is based in a different Member State. The possible risks for inter-brand competition of multiple exclusive dealerships are however higher at the wholesale than at the retail level. Where one wholesaler becomes the exclusive distributor for a significant number of suppliers, there is no only a risk that competition between these brands is reduced, but also a higher risk of foreclosure at the wholesale level of trade.

The assessment of an exclusive distribution system by which a customer group is exclusively allocated by a supplier to one or more buyers is subject to the same factors as those mentioned in paragraphs (100) to (117) of these Guidelines and should also take account of the following guidance:

As for exclusive allocation of territory, the exclusive allocation of a customer group normally makes arbitrage by the customers more difficult. In addition, as each appointed distributor has its own class of customers, distributors that have not been exclusively allocated any customer group may find it difficult to obtain the products from the supplier. Consequently, possible arbitrage by other distributors will be reduced.

An exclusive distribution system that restricts competition in the meaning of Article 101(1) may nevertheless create efficiencies that fulfil the conditions set in Article 101(3) and thus be exempted from the application of Article 101 on an individual basis.

As set out in paragraph (112) of these Guidelines, foreclosure of other suppliers is unlikely to arise unless exclusive distribution is combined with single branding. However, even when exclusive distribution is combined with single branding, anti-competitive foreclosure of other suppliers appears unlikely, except possibly when single branding is applied to a dense network of exclusive distributors with small territories or in case of a cumulative effect. In such a scenario, the principles on single branding set out in section 8.2.1. of these Guidelines should be applied. However, where the combination of exclusive distribution and single branding does not lead to significant foreclosure, it may actually be pro-competitive by increasing the incentives for the exclusive distributor to focus its efforts on a particular brand. Therefore, in the absence of such a significant foreclosure effect, the combination of exclusive distribution with single branding may fulfil the conditions of Article 101(3) for the whole duration of the agreement, particularly if applied at the wholesale level.

The combination of exclusive distribution with exclusive sourcing, which requires the exclusive distributors to buy their supplies for the supplier’s brand directly from the supplier, increases the competition risks associated with reduced intra-brand competition and market partitioning, which may in particular facilitate price
discrimination. Exclusive distribution already limits arbitrage by customers, as it limits the number of distributors and is typically combined with active sales restrictions imposed on other distributors in order to protect the investments made by exclusive distributors in the exclusive territory. Exclusive sourcing eliminates in addition possible arbitrage by the exclusive distributors, which are prevented from buying from other distributors in the exclusive distribution system. As a result, the supplier's possibilities to limit intra-brand competition by applying dissimilar conditions of sale to the detriment of consumers are enhanced, unless the combination of exclusive distribution with exclusive sourcing allows the creation of efficiencies leading to lower prices.

(123) The nature of the product can be relevant to the assessment of possible anti-competitive effects of exclusive distribution. Those effects will be less acute in sectors where online sales are more prevalent. It is also relevant to an assessment of possible efficiencies, that is, after an appreciable anti-competitive effect is established.

(124) Exclusive distribution may lead to efficiencies, especially where investments by the distributors are required to protect or build up the brand image and to provide demand enhancing services. In general, the case for efficiencies is strongest for new products, complex products and products whose qualities are difficult to judge before consumption (so-called experience products) or even after consumption (so-called credence products). In addition, exclusive distribution may lead to savings in logistic costs due to economies of scale in transport and distribution.

(125) The efficiencies that may result from shared exclusivity can be considered to outweigh any possible negative effects that such a system can generate provided that the supplier can demonstrate that the number of exclusive distributors has been determined in proportion to the allocated territory or customer group in such a way as to secure a certain volume of business that preserves the investment effort for the distributors.

(126) Exclusive distribution systems based on the allocation of exclusive customer groups that restrict Article 101(1) may also fulfil the conditions set out in Article 101(3) and thus be exempted from the application of Article 101 on an individual basis. Exclusive customer allocation may lead to efficiencies where the investments of the distributors are necessary to build the brand image or where the distributors are required to invest in, for instance, specific equipment, skills or know-how to adapt to the requirements of the exclusive customer group that has been allocated to them or when these investments to lead economies of scale or scope in logistics (for instance, having a dedicated retailer dealing with public administrations’ tenders for computers or office supplies). The depreciation period for these investments is an indication of the duration for which an exclusive distribution system based on the allocation of exclusive customer groups may be justified. In general, the justification for exclusive customer allocation is strongest for new or complex products and for products requiring adaptation to the needs of the individual customer. Identifiable differentiated needs are more likely for intermediate products that are sold to different types of professional buyers. Allocation of final consumers is unlikely to lead to efficiencies.

(127) Example of multiple exclusive dealerships in an oligopolistic market

On a national market for a final product, there are four market leaders, which each
have a market share of around 20%. Those four market leaders sell their product through exclusive distributors at the retail level. Retailers are given an exclusive territory which corresponds to the town in which they are located or a district of the town for large towns. In most territories, the four market leaders happen to appoint the same exclusive retailer (“multiple dealership”), often centrally located and rather specialised in the product. The remaining 20% of the national market is composed of small local producers, the largest of these producers having a market share of 5% on the national market. Those local producers sell their products in general through other retailers, in particular because the exclusive distributors of the four largest suppliers show in general little interest in selling less well-known and cheaper brands. There is strong brand and product differentiation on the market. The four market leaders have large national advertising campaigns and strong brand images, whereas the fringe producers do not advertise their products at the national level. The market is rather mature, with stable demand and no major product and technological innovation. The product is relatively simple.

In such an oligopolistic market, there is a risk of collusion between the four market leaders. That risk is increased through multiple dealerships. Intra-brand competition is limited by the territorial exclusivity. Competition between the four leading brands is reduced at the retail level, since one retailer fixes the price of all four brands in each territory. The multiple dealership implies that, if one producer cuts the price for its brand, the retailer will not be eager to transmit this price cut to the final consumer as it would reduce its sales and profits made with the other brands. Hence, producers have a reduced interest in entering into price competition with one another. Inter-brand price competition exists mainly with the low brand image goods of the fringe producers. The possible efficiency arguments for (joint) exclusive distributors are limited, as the product is relatively simple, the resale does not require any specific investments or training and advertising is mainly carried out at the level of the producers.

Even though each of the market leaders has a market share below the threshold, the conditions of Article 101(3) may not be fulfilled and withdrawal of the block exemption may be necessary for the agreements concluded with distributors whose market share is below 30% of the procurement market.

(128) Example of exclusive customer allocation

A company has developed a sophisticated sprinkler installation. The company has currently a market share of 40% on the market for sprinkler installations. When it started selling the sophisticated sprinkler it had a market share of 20% with an older product. The installation of the new type of sprinkler depends on the type of building where it is installed and on the use of the building (e.g. office, chemical plant or hospital). The company has appointed a number of distributors to sell and install the sophisticated sprinkler. Each distributor needed to train its employees for the general and specific requirements of installing the sophisticated sprinkler for a particular class of customers. To ensure that distributors would specialise, the company assigned to each distributor an exclusive class of customers and prohibited active sales to each other’s exclusive customer classes. After five years, all the exclusive distributors will be allowed to sell actively to all classes of customers, thereby ending the system of exclusive customer allocation. The supplier may then also start selling to new distributors. The market is quite dynamic, with two recent entries and a number of technological developments. The competitors have market shares between 25% and
5% and are also upgrading their products.

As the exclusivity is of limited duration and helps to ensure that the distributors may recoup their investments and concentrate their initial sales efforts on a certain class of customers in order to learn the trade, and as the possible anti-competitive effects seem limited in a dynamic market, the conditions of Article 101(3) are likely to be fulfilled.

4.6.2. Selective distribution systems

4.6.2.1. Definition of selective distribution systems

(129) As set out in Article 1(1)(h) VBER, in a selective distribution system, the supplier undertakes to sell the contract goods or services, either directly or indirectly, only to distributors selected on the basis of specified criteria and these distributors undertake not to sell such goods or services to unauthorised distributors within the territory reserved by the supplier to operate that system.

(130) The criteria used by the supplier to select distributors can be qualitative and/or quantitative in nature. Qualitative criteria are objective criteria required by the nature of the product, such as the training of sales personnel, the service provided at the point of sale, and the product range being sold. Quantitative criteria limit the potential number of dealers more directly by, for instance, requiring minimum or maximum sales or fixing the number of dealers. These criteria can be changed throughout the duration of the selective distribution agreement.

(131) Selective distribution systems are comparable to exclusive distribution systems in that they restrict the number of authorised distributors and the possibilities of resale. The difference with exclusive distribution is the restriction of the number of dealers based on specific selection criteria. Another difference with exclusive distribution is that the restriction on resale associated with selective distribution is not a restriction on active sales into an exclusive territory or to an exclusive customer group, but a restriction on active and passive sales to non-authorised distributors, leaving only authorised distributors and final customers as possible buyers.

4.6.2.2. Application of Article 101 to selective distribution systems

(132) The possible competition risks of selective distribution systems are a reduction in intra-brand competition and, especially in the case of a cumulative effect, the foreclosure of certain type(s) of distributors, as well as the softening of competition and potentially the facilitation of collusion between buyers due to limiting their number.

(133) The assessment of the possible anti-competitive effects of selective distribution should focus first on the compliance of the selective distribution system with Article 101(1). To that end, a distinction needs to be drawn between purely qualitative selective distribution and quantitative selective distribution.

(134) Purely qualitative selective distribution where dealers are selected only on the basis objective criteria required by the nature of the product does not put a direct limit on the number of dealers. Provided that the three conditions laid down by the European

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52 See e.g. judgment in Case T-88/92 Groupement d'achat Édouard Leclerc v Commission EU:T:1996:192, paragraphs 125 and seq.
Court of Justice in the *Metro* judgment\(^{53}\) (so-called “Metro criteria”) are fulfilled, purely qualitative selective distribution is generally considered to fall outside Article 101(1), as it can be assumed that the restriction of intra-brand competition associated with selective distribution is offset by an improvement in inter-brand quality competition.\(^{54}\) First, the nature of the goods or services in question must necessitate a selective distribution system. This means that, having regard to the nature of the product concerned, such a system must constitute a legitimate requirement to preserve its quality and ensure its proper use. For instance, a selective distribution system that falls outside Article 101(1) can be operated for high-quality or high-technology products.\(^{55}\) Operating a selective distribution system may also be necessary for luxury goods. The quality of such goods may result not just from their material characteristics, but also from the aura of luxury surrounding them. Therefore, establishing a selective distribution system which seeks to ensure that the goods are displayed in a manner that contributes to sustaining this aura of luxury may be necessary to preserve their quality.\(^{56}\) Secondly, resellers must be chosen on the basis of objective criteria of a qualitative nature, which are laid down uniformly for all potential resellers and are not applied in a discriminatory manner. Although the case law does not require that the qualitative criteria be made known to all potential resellers, such transparency may increase the likelihood of fulfilling the Metro criteria.\(^{57}\) Thirdly, the criteria laid down must not go beyond what is necessary.\(^{58}\)

\(135\) The assessment of selective distribution under Article 101(1) also requires a separate analysis of each potentially restrictive clause of the agreement under the Metro criteria.\(^{59}\) This implies, in particular, determining whether the restrictive clause is proportionate in the light of the objective pursued by the selective distribution system and whether it goes beyond what is necessary to achieve this objective.\(^{60}\) Such requirements are unlikely to be met by hardcore restrictions. Conversely, for

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\(^{56}\) See judgment Case C-230/16 Coty Germany GmbH v Parfümerie Akzente GmbH EU:C:2017:941, paragraphs 25 to 29.

\(^{57}\) See also by analogy judgement Case C-158/11 Auto 24 SARL v Jaguar Land Rover France SAS EU:C:2012:351.


\(^{59}\) See paragraph (134) of these Guidelines.

\(^{60}\) See judgment Case C-230/16 Coty Germany GmbH v Parfümerie Akzente GmbH EU:C:2017:941, paragraphs 43 et seq.
instance, a ban on the use imposed in a discernible manner third-party online platforms by a supplier of luxury goods on its authorised distributors may be considered appropriate, as long as it allows authorised distributors to advertise via the internet on third-party platforms and to use online search engines, with the result that customers are usually able to find the online offer of authorised distributors by using such engines, and not going beyond what is necessary to preserve the luxury image of those goods.\(^{61}\) If this is the case, it falls outside of Article 101(1) and no further analysis is required.

(136) Even if they do not meet the Metro criteria, qualitative and/or quantitative selective distribution systems can benefit from the safe harbour, provided the market shares of both the supplier and the buyer each do not exceed 30\% and the agreement does not contain any hardcore restriction.\(^{62}\) The benefit of the exemption is not lost if selective distribution is combined with other non-hardcore vertical restraints, such as a non-compete obligation. The block exemption applies regardless of the nature of the product concerned and the nature of the selection criteria. However, where the characteristics of the product do not require selective distribution\(^{63}\) or do not require the applied criteria, such as the requirement for distributors to have one or more brick and mortar shops or to provide specific services, such a distribution system does not generally bring about sufficient efficiency enhancing effects to counterbalance a significant reduction in intra-brand competition. Where appreciable anti-competitive effects occur, the benefit of the VBER is likely to be withdrawn.

(137) The remainder of this section provides guidance for the individual assessment of selective distribution system that do not fulfil the Metro criteria and are not covered by the VBER, or in the case of cumulative effects resulting from parallel networks of selective distribution in the same market.

(138) The market position of the supplier and its competitors is of central importance in assessing possible anti-competitive effects, as the loss of intra-brand competition can only be problematic if inter-brand competition is limited. The stronger the position of the supplier, notably above the 30\% threshold, the higher the risk for competition resulting from the increased loss of intra-brand competition. Another important factor is the number of selective distribution networks present in the same market. Where selective distribution is applied by only one supplier in the market, quantitative selective distribution does not normally create net negative effects. In practice, however, selective distribution is often applied by several suppliers in a particular market.

(139) The position of competitors can have a dual significance. On the one hand, the existence of strong competitors will generally indicate that the reduction in intra-brand competition, which can be particularly important in the context of sole distribution, is outweighed by sufficient inter-brand competition. On the other hand,

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\(^{61}\) See judgment Case C-230/16, Coty Germany GmbH v Parfümerie Akzente GmbH EU:C:2017:941, paragraphs 43 et seq., and in particular paragraph 67.


in the case of a cumulative effect, when a majority of the leading suppliers in a market apply selective distribution, there could be foreclosure of certain types of distributors (i.e. price discounters). The risk of foreclosure of more efficient distributors is greater with selective distribution than with exclusive distribution, given the restriction on sales to non-authorised dealers in selective distribution. That restriction is designed to give selective distribution systems a closed character in which only the authorised distributors that fulfil the criteria have access to the product while making it impossible for non-authorised dealers to obtain supplies. Accordingly, selective distribution is particularly well suited to avoid pressure by price discounters (whether offline or pure online distributors) on the margins of the manufacturer, as well as on the margins of the authorised distributors. Foreclosure of such distribution formats, whether resulting from the cumulative use of selective distribution or from its use by a single supplier with a market share exceeding 30%, reduces the possibilities for consumers to take advantage of the specific benefits offered by these distribution formats such as lower prices, more transparency and wider access to the product.

(140) Where the VBER applies to individual selective distribution networks, the withdrawal of the block exemption or the disapplication of the VBER may be considered in the case of cumulative effects. However, a cumulative effects problem is unlikely to arise when the share of the market covered by selective distribution does not exceed 50%. Also, competition concerns are unlikely to arise where the market coverage exceeds 50%, but the aggregate market share of the five largest suppliers does not exceed 50%. Where both the share of the five largest suppliers and the share of the market covered by selective distribution exceed 50%, the assessment may vary depending on whether or not all five largest suppliers apply selective distribution. The stronger the position of the competitors that do not apply selective distribution, the less likely that other distributors will be foreclosed. Competition concerns may arise if all five largest suppliers apply selective distribution. Such would particularly be the case if the agreements concluded by the largest suppliers contain quantitative selection criteria which directly limit the number of authorised dealers or when the qualitative criteria applied foreclose certain distribution formats, such as a requirement to have one or more brick and mortar shops or to provide specific services that can typically only be provided in a particular distribution format. The conditions of Article 101(3) are in general unlikely to be fulfilled if the selective distribution systems that contribute to the cumulative effect prevent access to the market to new distributors that are capable of adequately selling the products in question. In particular, final consumers are unlikely to benefit from efficiencies if the distribution systems only include certain existing channels while excluding from the market price discounters or pure online distributors which offer lower prices to consumers. More indirect forms of quantitative selective distribution, resulting for instance from the combination of purely qualitative selection criteria with a requirement for the dealers to achieve a minimum amount of annual purchases, are less likely to produce net negative effects, if the amount does not represent a significant proportion of the dealer's total turnover achieved with the type of products in question and does not go beyond what is necessary for the supplier to recoup its relationship-specific investment and/or realise economies of scale in distribution. A supplier with a market share not exceeding 5% is in general not considered to contribute significantly to a cumulative effect.

(141) Entry barriers are mainly relevant in the case of foreclosure of non-authorised distributors from the market. Entry barriers could be significant when selective
distribution is applied by manufacturers of branded products as it will generally take time and considerable investment for distributors excluded from the selective distribution system to launch their own brands or obtain competitive supplies elsewhere.

(142) Buying power may increase the risk of collusion between distributors. Distributors holding a strong market position may induce the suppliers to apply selective criteria that would foreclose market access to new and more efficient distributors. Consequently, buying power may appreciably change the analysis of possible anti-competitive effects of selective distribution. Foreclosure of more efficient distributors from the market may especially arise where a strong dealer organisation imposes selection criteria on the supplier aimed at limiting distribution to the advantage of its members.

(143) Article 5(1)(c) of the VBER provides that the supplier may not impose an obligation causing the authorised distributors, either directly or indirectly, not to sell the brands of particular competing suppliers. This provision aims specifically at avoiding horizontal collusion to exclude particular brands through the creation of a selective group of brands by the leading suppliers. Such an obligation is unlikely to be exemptible when the market share of the five largest suppliers is equal to or exceeds 50%, unless none of the suppliers imposing such an obligation belongs to the five largest suppliers on the market.

(144) Competition concerns relating to the foreclosure of other suppliers will normally not arise as long as other suppliers are not prevented from using the same distributors, as, for example, when selective distribution is combined with single branding. In the case of a dense network of authorised distributors or in the case of a cumulative effect, the combination of selective distribution and a non-compete obligation may pose a risk of foreclosure of other suppliers. In that case, the principles set out in section 2.1. of these Guidelines on single branding apply. Where selective distribution is not combined with a non-compete obligation, foreclosure of competing suppliers from the market may still be a concern where the leading suppliers apply not only purely qualitative selection criteria, but also impose on their distributors certain additional obligations such as the obligation to reserve a minimum shelf-space for the supplier’s products or to ensure that the distributor’s sales of the supplier’s products reach a minimum share of the distributor's total turnover. Such a problem is unlikely to arise if the share of the market covered by selective distribution is does not exceed 50% or, where this coverage ratio is exceeded, if the market share of the five largest suppliers does not exceed 50%.

(145) Assessing the dynamics of the market is important as growing demand, changing technologies and changing market positions may make negative effects less likely than in mature markets.

(146) Selective distribution may be efficient when it leads to savings in logistical costs due to economies of scale in transport, which may occur irrespective of the nature of the product (see paragraph (14)(g) of these Guidelines). However, such an efficiency is usually only marginal in selective distribution systems. To assess whether selective distribution is justified to help solve a free-rider problem between distributors (see paragraph (14)(b) of these Guidelines) or to help create or maintain a brand image (see paragraph (14)(h) of these Guidelines), the nature of the product is important. In general, the use of selective distribution to achieve these types of efficiencies is more likely to be justified for new products, complex products or products whose
qualities are difficult to judge before consumption (so-called experience products) or even after consumption (so-called credence products). The combination of selective distribution with a location clause, to protect an authorised distributor against competition from other authorised distributors opening a shop in its vicinity, may in particular fulfil the conditions of Article 101(3) if the combination is indispensable to protect substantial and relationship-specific investments made by the authorised distributor (see paragraph (14)(e) of these Guidelines). To ensure that the least anti-competitive restraint is used, it is relevant to assess whether the same efficiencies can be obtained at a comparable cost by, for instance, service requirements alone.

(147) Example of quantitative selective distribution

On a market for consumer durables, brand manufacturer A, which is the market leader with a market share of 35%, sells its product to final consumers through a selective distribution system. There are several criteria for admission to the system: the shop must employ trained staff and provide pre-sales services, there must be a specialised area in the shop devoted to the sales of the product and similar hi-tech products, and the shop is required to sell a wide range of models of the supplier and to display them in an attractive manner. Moreover, the number of admissible retailers in the system is directly limited through the establishment of a maximum number of retailers per number of inhabitants in each province or urban area. Manufacturer A has 6 competitors in that market. Brand manufacturers B, C and D are its largest competitors with market shares of respectively 25%, 15% and 10%, whilst other manufacturers have smaller market shares. A is the only manufacturer that uses selective distribution. The selective distributors of brand A always handle a few competing brands. However, competing brands are also widely sold in shops which are not members of manufacturer A's selective distribution system. There are various channels of distribution: for instance, brands B and C are sold in most of A's selected shops, but also in other shops providing a high quality service, and in hypermarkets. Brand D is mainly sold in high service shops. Technology is evolving quite rapidly in this market, and the main suppliers maintain a strong quality image for their products through advertising.

On this market, the coverage ratio of selective distribution is 35%. Inter-brand competition is not directly affected by the selective distribution system of A. Intra-brand competition for brand A may be reduced, but consumers have access to low service/low price retailers for brands B and C, which have a comparable quality image to brand A. Moreover, access to high service retailers for other brands is not foreclosed, since there is no limitation on the capacity of selected distributors to sell competing brands, and the quantitative limitation on the number of distributors for brand A leaves other high service retailers free to distribute competing brands. In this case, in view of the service requirements and the efficiencies that these are likely to provide and the limited effect on intra-brand competition, the conditions of Article 101(3) are likely to be fulfilled.

(148) Example of selective distribution with cumulative effects

On a market for a particular sports article, there are seven manufacturers, whose respective market shares are 25%, 20%, 15%, 15%, 10%, 8% and 7%. The five largest manufacturers distribute their products through quantitative selective distribution, whilst the two smallest use different types of distribution systems, which results in a coverage ratio of selective distribution of 85%. The criteria for access to the selective
Distribution systems are uniform across the manufacturers: the distributors are required to have one or more brick and mortar shops, those shops are required to have trained personnel and to provide pre-sale services, there must be a specialised area in the shop devoted to the sales of the product, and a minimum size for this area is specified. The shop is required to sell a wide range of the brand in question and to display the product in an attractive manner, the shop must be located in a commercial street, and the product must represent at least 30% of the total turnover of the shop. In general, the same distributor is authorised for all five brands. The two brands which do not use selective distribution usually sell through less specialised retailers with lower service levels. The market is stable, both on the supply and on the demand side, and there is strong product differentiation with brand image being important. The five market leaders have strong brand images acquired through advertising and sponsoring, whereas the two smaller manufacturers have a strategy of cheaper products, with no strong brand image.

On this market, access to the five leading brands by general price discounters and pure online distributors is denied. This is because the requirement that the product represents at least 30% of the activity of the distributors and the criteria on presentation and pre-sales services rule out most price discounters from the network of authorised distributors. Moreover, the requirement to have one or more brick and mortar shops excludes pure online distributors from the network. As a consequence, consumers have no choice but to buy the five leading brands in high service/high price shops. This leads to reduced inter-brand competition between the five leading brands. The fact that the two smallest brands can be bought in low service/low price shops does not compensate for this, because the brand image of the five market leaders is much better. Inter-brand competition is also limited through multiple dealerships. Even though there exists some degree of intra-brand competition and the number of distributors is not directly limited, the criteria for admission are strict enough to lead to a small number of distributors for the five leading brands in each territory.

The efficiencies associated with such quantitative selective distribution systems are low: the product is not very complex and does not justify a particularly high service. Unless the manufacturers can prove that there are clear efficiencies associated with their selective distribution system, it is likely that the block exemption will have to be withdrawn, due to the presence of cumulative restrictive effects resulting in less choice and higher prices for consumers.

4.6.3. Franchising

Franchise agreements contain licences of intellectual property rights relating in particular to trademarks or signs and know-how for the use and distribution of goods or services. In addition to the licence of IPRs, the franchisor usually provides the franchisee during the lifetime of the agreement with commercial or technical assistance. The licence and the assistance are integral components of the business method being franchised. The franchisor is in general paid a franchise fee by the franchisee for the use of the particular business method. Franchising may enable the franchisor to establish, with limited investments, a uniform network for the distribution of its products. In addition to the provision of the business method, franchise agreements usually contain a combination of different vertical restraints concerning the products being distributed, in particular selective distribution, non-compete obligations, exclusive distribution or weaker forms thereof.
Franchising (with the exception of industrial franchise agreements) presents some specific characteristics, such as the use of a uniform business name, the application of uniform business methods (including the licensing of IPRs) and the payment of royalties in return for the benefits granted. In view of these specificities, provisions that are strictly necessary for the functioning of such distribution systems can be considered as falling outside Article 101(1). This concerns, for instance, restrictions that prevent the know-how and assistance provided by the franchisor from benefiting his competitors and a non-compete obligation with regard to the goods or services purchased by the franchisee that is necessary to maintain the common identity and reputation of the franchise network. In the latter case, the duration of the non-compete obligation is irrelevant as long as it does not exceed the duration of the franchise agreement itself.

Franchise agreements are covered by the VBER where both the supplier’s and the buyer’s market shares do not exceed 30%. The licensing of IPRs contained in franchise agreements is dealt with in paragraphs (67) to (82) of these Guidelines. Vertical restraints contained in franchise agreements will be assessed under the rules applicable to the distribution system that most closely relates to the nature of the specific franchise agreement. For instance, a franchise agreement that gives rise to a closed network since members are forbidden from selling to non-members shall be assessed under the rules applicable to selective distribution. In contrast, a franchise agreement that grants territorial exclusivity and protection from active sales by other franchisees shall be assessed under the rules applicable to exclusive distribution.

Franchising agreements that include hardcore restrictions, including RPM, shall not be covered by the VBER. The Agreements that are not covered by the VBER require an individual assessment under Article 101. This assessment should take into account that the more important the transfer of know-how, the more likely it is that the vertical restraints create efficiencies and/or are indispensable to protect the know-how and thus fulfil the conditions of Article 101(3).

Example of franchising

A manufacturer has developed a new format for selling sweets in so-called fun shops where the sweets can be coloured on demand from the consumer. The sweets manufacturer has also developed the machines to colour the sweets and produces the colouring liquids. The quality and freshness of the liquid is of vital importance to producing good sweets. The manufacturer made a success of its sweets through a number of own retail outlets all operating under the same trade name and with the uniform fun image (e.g. common shop style and advertising). In order to expand sales, the sweets manufacturer has started a franchising system. To ensure a uniform product quality and shop image, the franchisees are obliged to buy the sweets, liquid and colouring machine from the manufacturer, to operate under the same trade name, to pay a franchise fee, to contribute to common advertising and to ensure the confidentiality of the operating manual prepared by the franchisor. In addition, the franchisees are only allowed to sell from the agreed premises to end users or other

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64 See judgment in Case 161/84 Pronuptia de Paris GmbH v Pronuptia de Paris Irmgard Schillgallis EU:C:1986:41, paragraph 16.
65 See also paragraphs (86) to (95), in particular paragraph (92).
franchisees. They are not allowed to sell other sweets in their shops. The franchisor is obliged not to appoint another franchisee nor operate a retail outlet himself in a given contract territory. The franchisor is also under the obligation to update and further develop its products, the business outlook and the operating manual and to make these improvements available to all franchisees. The franchise agreements are concluded for a duration of 10 years.

Sweet retailers buy their sweets on a national market from either national producers that cater for national tastes or from wholesalers that import sweets from foreign producers in addition to selling sweets from national producers. On that market, the franchisor's products compete with a number of national and international brands of sweets, sometimes produced by large diversified food companies. The franchisor's market share of the market for machines for colouring food is below 10%. The franchisor has a market share of 30% on the market for sweets sold to retailers. There are many points of sale for sweets in the form of tobacconists, general food retailers, cafeterias and specialised sweet shops.

Most of the obligations contained in the franchise agreements can be deemed necessary to protect IPRs or to maintain the common identity and reputation of the franchise network and thus fall outside Article 101(1). The restrictions on selling (i.e. the determination of a contract territory and selective distribution) provide an incentive to the franchisees to invest in the franchise concept and the colouring machine and to help maintain the common identity, thereby offsetting the loss of intra-brand competition. The non-compete clause excluding other brands of sweets from the shops for the full duration of the agreements allows the franchisor to keep the outlets uniform and prevents competitors from benefiting from its trade name. In view of the high number of outlets available to other sweets producers, it does not lead to any serious foreclosure. Consequently, the franchise agreements are likely to fulfil the conditions for exemption under Article 101(3) to the extent that they fall under Article 101(1).

5. MARKET DEFINITION AND MARKET SHARE CALCULATION

5.1. Market Definition Notice

(154) The Commission Notice on the definition of relevant market for the purposes of Community competition law (“Market Definition Notice”) provides guidance on the rules, criteria and evidence which the Commission uses when considering market definition issues. The relevant market for the purpose of applying Article 101 to vertical agreements should therefore be defined on the basis of that guidance and any future guidance relating to the definition of relevant market for the purposes of EU competition law. These Guidelines only deal with specific issues that arise in the context of the application of the VBER, and that are not covered by the Market Definition Notice.

5.2. The calculation of market shares under the VBER

(155) Under Article 3 VBER, the market share of both the supplier and the buyer are decisive to determine if the block exemption applies. In order for the VBER to apply, the market share of the supplier on the market where it sells the contract goods or

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services to the buyer and the market share of the buyer on the market where it purchases the contract goods or services, must not exceed 30%. For agreements between SMEs it is in general not necessary to calculate market shares (see paragraph (26) of these Guidelines).

(156) At the distribution level the vertical restraints usually concern not only the sale of products between supplier and buyer, but also their resale. As different distribution formats usually compete, markets are in general not defined by the form of distribution that is applied, namely exclusive, selective or free distribution. Where suppliers generally sell a portfolio of products, the entire portfolio may determine the product market definition when the portfolio and not the individual products contained in the portfolio are regarded as substitutes by the buyers.

(157) Where a vertical agreement involves three parties, each operating at a different level of trade, each party's market share must not exceed 30% in order for the VBER to apply. As specified in Article 3(2) VBER, where in a multi-party agreement an undertaking buys the contract goods or services from one undertaking that is a party to the agreement and sells the contract goods or services to another undertaking that is also a party to the agreement, the VBER only applies if its market share does not exceed the 30% threshold both as a buyer and a supplier. If, for instance, in an agreement between a manufacturer, a wholesaler (or association of retailers) and a retailer, a non-compete obligation is agreed, then the market shares of the manufacturer and the wholesaler (or association of retailers) on their respective supply markets must not exceed 30% and the market share of the wholesaler (or association of retailers) and the retailer must not exceed 30% on their respective purchase markets in order to benefit from the VBER.

(158) Where the vertical agreement, in addition to the supply of the contract goods or services, also contains IPR provisions (such as a provision concerning the use of the supplier’s trademark), which help the buyer to market the contract goods or services, the supplier’s market share on the market where it sells the contract goods or services is relevant for the application of the VBER. Where a franchisor does not supply goods or services for the resale of these goods or services, but provides a bundle of goods or services combined with IPR provisions that together form the business method being franchised, the franchisor needs to take account of its market share as a provider of a business method for the provision of specific goods or services to end users. For that purpose, the franchisor needs to calculate its market share on the market where the business method is exploited by the franchisees to provide goods or services to end users. The franchisor must therefore base its market share on the value of the goods or services supplied by its franchisees on this market. On such a market, the franchisor’s competitors may be providers of other franchised business methods, but also suppliers of substitutable goods or services not applying franchising. For instance, without prejudice to the definition of such a market, if there was a market for fast-food services, a franchisor operating on such a market would need to calculate its market share on the basis of the relevant sales figures of its franchisees on this market.

5.3. Calculation of market shares under the VBER

(159) As set out in Article 7(a) VBER, the market shares of the supplier and the buyer should in principle be calculated on the basis of value data. Where value data are not available, substantiated estimates can be made on the basis of other reliable market information such as volume figures.
The in-house supply of intermediate goods or services for the supplier’s own use may be relevant for the competition analysis in a particular case, but it will not be taken into account for the purposes of market definition or for the calculation of market shares under the VBER. By contrast, pursuant to Article 7(c) VBER, in the case of dual distribution of final goods (i.e. where a supplier of final goods also acts as a distributor of those goods on the market), the market definition and market share calculation should include the supplier’s sales of its own goods made through its vertically integrated distributors and agents. Integrated distributors are connected undertakings within the meaning of Article 1(2) VBER.  

6. APPLICATION OF THE VBER

6.1. Hardcore restrictions under the VBER

Article 4 VBER contains a list of hardcore restrictions, which are considered serious restrictions of competition that should in most cases be prohibited because of the harm they cause to consumers. Vertical agreements that include one or more hardcore restrictions are excluded as a whole from the scope of application of the VBER.

The hardcore restrictions in Article 4 VBER apply to vertical agreements concerning trade within the Union. Therefore, in so far as vertical agreements concern exports outside the Union or imports/re-imports from outside the Union the case law of the CJEU suggests that such agreements cannot be regarded as having the object of appreciably restricting competition within the Union or as being capable of affecting such trade between Member States.

Hardcore restrictions pursuant to Article 4 VBER are generally restrictions of competition by object within the meaning of Article 101(1). Restrictions of competition by object within the meaning of Article 101(1) are agreements which, by their very nature, have the potential to restrict competition. In that regard, it is apparent from the Court’s case-law that certain types of coordination between undertakings reveal a sufficient degree of harm to competition that it may be found that there is no need to examine their effects. A finding of a restriction by object requires an individual assessment of the vertical agreement concerned. In contrast, hardcore restrictions correspond to a category of restrictions under the VBER for which it is presumed that they generally result in harm to competition so that a vertical agreement containing such a hardcore restriction cannot be block exempted pursuant to Article 2(1) VBER.

However, hardcore restrictions do not necessarily fall within the scope of Article 101(1). If a hardcore restriction under the VBER is objectively necessary for a vertical agreement of a particular type or nature, for instance, to ensure compliance with a public ban on selling dangerous substances to certain customers for reasons of safety or health, this agreement falls exceptionally outside the scope of Article 101(1).

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68 For these market definition and market share calculation purposes, it is not relevant whether the integrated distributor sells in addition goods or services of competitors.
70 See Commission, Guidance on restrictions of competition “by object” for the purpose of defining which agreements may benefit from the De Minimis Notice, SWD(2014) 198 final, p. 4.
71 See judgment in Case C-8/08 T-Mobile Netherlands EU:C:2009:343, paragraph 31.
72 See judgment in Case C-67/13 Groupement des Cartes Bancaires EU:C:2014:2204, paragraph 49.
101(1). In light of the above, in particular that hardcore restrictions are generally restrictions of competition by object, the Commission will apply the following principles when assessing a vertical agreement:

(a) Where a hardcore restriction within the meaning of Article 4 VBER is included in a vertical agreement, this agreement is likely to fall within Article 101(1).

(b) An agreement that includes a hardcore restriction within the meaning of Article 4 VBER is unlikely to fulfil the conditions of Article 101(3).

An undertaking may demonstrate pro-competitive effects under Article 101(3) in an individual case. For this purpose, the undertaking has to substantiate that efficiencies are likely and that these efficiencies are likely to result from including the hardcore restriction in the agreement, when demonstrating that all the conditions of Article 101(3) are fulfilled. Where this is the case, the Commission will assess the negative impact on competition that is likely to result from including the hardcore restriction in the agreement before making an ultimate assessment of whether the conditions of Article 101(3) are fulfilled.

The examples in the following three paragraphs of these Guidelines are meant to illustrate under which exceptional circumstances a hardcore restriction may fall outside the scope of Article 101(1).

Example of genuine entry

A distributor which is the first to sell a new brand or an existing brand on a new market, thereby ensuring a genuine entry, may have to commit substantial investments if there was previously no demand for the particular type of product in general or for the type of product from the particular producer. In such circumstances, considering that such expenses may often be sunk, the distributor may not enter into the distribution agreement without protection for a certain period of time against active and passive sales into its territory or to its customer group by other distributors.

For example, such a situation may occur where a manufacturer established in a particular national market enters another national market and introduces its products with the help of an exclusive distributor, which needs to invest in launching and establishing the brand on this new market. Where substantial investments by the distributor to start up and/or develop the new market are necessary, restrictions of passive sales by other distributors into such a territory or to such a customer group which are necessary for the distributor to recoup those investments generally fall outside the scope of Article 101(1) during the first two years during which the distributor is selling the contract goods or services in that territory or to that customer.

74 See in particular paragraphs (14)(a) to (i) of these Guidelines describing in general possible efficiencies related to vertical restraints and section 6.1.1. of these Guidelines on resale price restrictions. See for general guidance on this the Communication from the Commission – Notice – Guidelines on the application of Article 81(3) of the Treaty, OJ C 101, 27.4.2004, p. 97.
75 Such an assessment is without prejudice to the fact that a specific restriction may nevertheless be automatically void if it amounts to a violation of the prohibitions regarding passive sales set out in the Geoblocking Regulation, see Article 6(2) of Regulation (EU) 2018/302 of the European Parliament and of the Council of 28 February 2018 on addressing unjustified geo-blocking and other forms of discrimination based on customers' nationality, place of residence or place of establishment within the internal market and amending Regulations (EC) No 2006/2004 and (EU) 2017/2394 and Directive 2009/22/EC.
group, even though such restrictions would normally be considered hardcore restrictions presumed to fall within the scope of Article 101(1).

(168) Example of cross-supplies between authorised distributors

In the case of a selective distribution system, cross-supplies between authorised distributors must normally remain free (see paragraph 187 of these Guidelines). However, if authorised wholesalers located in different territories are obliged to invest in promotional activities in the territory in which they distribute the goods or services concerned in order to support the sales by authorised distributors and it is not practical to specify in a contract the required promotional activities, restrictions on active sales by these wholesalers to authorised distributors in other wholesalers’ territories to overcome possible free-riding may, in an individual case, fulfil the conditions of Article 101(3).

(169) Example of genuine testing

In the case of genuine testing of a new product in a limited territory or with a limited customer group or in the case of a staggered introduction of a new product, the distributors appointed to sell the new product on the test market or to participate in the first round(s) of the staggered introduction may be restricted in their active selling outside the test market or the market(s) where the product is first introduced without falling within the scope of Article 101(1) for the period necessary for the testing or introduction of the product.

6.1.1. Resale price maintenance

(170) The hardcore restriction set out in Article 4(a) VBER concerns resale price maintenance (hereafter “RPM”), that is, agreements or concerted practices having as their direct or indirect object the establishment of a fixed or minimum resale price or a fixed or minimum price level to be observed by the buyer. A vertical agreement or concerted practice that relates to a certain range within which the buyer has to price is therefore not in line with Article 4(a) VBER.

(171) RPM can be established through direct means. This is the case for contractual provisions or concerned practices that directly establish the retail price and therefore result in clear-cut restrictions. Such restrictions include contractual provisions allowing the supplier to set the price that the buyer has to charge its customer or prohibiting the buyer to sell below a certain price level. The restriction is also clear-cut where a supplier requests a price increase and the buyer complies with such a request.

(172) RPM can also be achieved through indirect means, including incentives to observe a minimum price or disincentives to deviate from a minimum price. The following examples are meant to provide a non-exhaustive list of such indirect means:

For the distinction between vertical agreements and concerted practices see paragraphs (48) to (51) of these Guidelines. However, this distinction has so far not played an important role in the enforcement practice since it is not necessary to distinguish between the two to find an infringement of Article 101. Furthermore, it should be noted that RPM can be linked to other restrictions, including horizontal collusion in the form of hub-and-spoke arrangements, which are addressed in the Horizontal Guidelines, paragraph 55.

See, for example, Commission Decisions in AT.40182 Guess, paragraphs 84, 86, and 137.
– Fixing the distribution margin;
– Fixing the maximum level of a discount that the distributor can grant from a prescribed price level;
– Making the grant of rebates or the reimbursement of promotional costs by the supplier subject to the observance of a given price level;
– Linking the prescribed resale price to the resale prices of competitors; and
– Threats, intimidations, warnings, penalties, the delay or suspension of deliveries or contract terminations in relation to the observance of a given price level.

(173) However, as set out in Article 4(a) VBER, the imposition of a maximum retail price or the determination of a resale price recommendation by the supplier does not in itself amount to RPM. However, if the supplier combines such a maximum price or resale price recommendation with incentives to apply a certain price level or disincentives to lower the sales price, this can amount to RPM. An example of incentives to apply a certain price level would be the reimbursement of promotional costs in case of compliance with the maximum resale price or the recommended resale price. An example of disincentives to lower the sales price would be an intervention of the supplier in case the buyer deviates from the maximum or recommended resale price by, for instance, threatening to cut further supplies.

(174) Similarly, minimum advertised price policies (“MAPs”), which prohibit retailers from advertising prices below a certain amount set by the supplier, may also amount to RPM for instance in cases where the supplier sanction retailers for ultimately selling below the respective MAPs, require them not to offer discounts or prevent them from communicating that the final price could differ from the respective MAP.

(175) Direct or indirect means of achieving price fixing can be made more effective when combined with measures aimed at identifying price-cutting distributors, such as the implementation of a price monitoring system, or the obligation on retailers to report other members of the distribution network that deviate from the standard price level. These measures are, however, in themselves not sufficient for a finding of RPM since they may be used by suppliers to increase the efficiency of the supply or distribution chain or for other purposes unrelated to direct or indirect means of achieving RPM.

(176) Price monitoring is increasingly used in e-commerce where both manufacturers and retailers often use specific price monitoring software.78 Such price monitoring does not constitute RPM as such. It however increases price transparency in the market, which allows manufacturers to effectively track the resale prices in their distribution network and to intervene swiftly in case of price decreases. It also allows retailers to effectively track the prices of their competitors and report price decreases to the manufacturer, together with a request to intervene against such price decreases.79

79 See Commission Decisions in AT.40182 Pioneer, paragraphs 136 and 155; AT.40182 Denon & Marantz, paragraph 95; AT.40181 Philips, paragraph 64; See Commission Decisions in AT.40182 Pioneer, paragraphs 136; AT.40465 Asus, paragraph 27.
In the case of agency agreements, the principal normally establishes the sales price, as it bears the commercial and financial risks relating to the sale. However, where such an agreement cannot be qualified as an agency agreement for the purposes of applying Article 101(1) (see in particular paragraphs (40) to (43) of these Guidelines), an obligation preventing or restricting the agent from sharing its commission with the customer, irrespective of whether the commission is fixed or variable, is a hardcore restriction under Article 4(a) VBER. To avoid the use of such a hardcore restriction, the agent should be left free to reduce the effective price paid by the customer without reducing the income for the principal.\(^8\)

The fixing of the resale price in a vertical agreement between a supplier and a buyer that executes a prior agreement between the supplier and a specific end user (hereinafter “fulfilment contract”) does not constitute RPM where the end user has waived its right to choose the undertaking that should execute the agreement. In such a case, the fixing of the resale price does not result in a restriction of Article 101(1) since the resale price is no longer subject to competition in relation to the end user concerned. However, this only applies in case the fulfilment contract does not constitute an agency agreement falling outside the scope of Article 101(1), as described in particular in paragraphs (40) to (43) of these Guidelines for instance because the buyer acquires the ownership of the contract goods intended for resale or because it assumes more than insignificant risks in relation to the execution of the contract. In contrast, where the end user has not waived its right to choose the undertaking that should execute the agreement, the supplier cannot fix the resale price without infringing Article 4(a) VBER. However, it may set a maximum resale price with a view to allowing price competition for the execution of the agreement.

Article 4(a) VBER is fully applicable in the online platform economy. In particular, if an undertaking is a provider of online intermediation services according to Article 1(1)(d) VBER, it is a supplier and must therefore comply with Article 4(a) VBER to avoid a hardcore restriction with regard to the intermediated goods or services. While this does not prevent an online intermediation services provider from incentivising the users of the online intermediation services to sell their goods or services at a competitive level or to reduce their prices, Article 4(a) VBER prohibits the online intermediation services provider from imposing a fixed or minimum sales price for the transaction that it facilitates.

The CJEU has held on several occasions that an agreement establishing minimum or fixed retail prices, which prevents the buyer from determining its resale prices independently, restricts competition by object within the meaning of Article 101(1).\(^8\) However, as mentioned in paragraphs (163) to (165) of these Guidelines, the qualification of a restriction as a hardcore restriction, and by object restriction, does not mean that agreements that amount to RPM are per se infringements of Article 101. Where undertakings consider that RPM is efficiency enhancing in an individual case, they may bring forward efficiency justifications under Article 101(3).

RPM is generally considered a serious restriction of competition, as it can restrict intra-brand and/or inter-brand competition in different ways:

(a) The direct effect of RPM is the elimination of intra-brand price competition by preventing all or certain distributors from lowering their sales price for the brand concerned, thus resulting in a price increase for that brand.

(b) RPM may facilitate collusion between suppliers, notably in markets prone to collusive outcomes, for instance, where suppliers form a tight oligopoly and a significant part of the market is covered by RPM agreements. This may also be the case where suppliers distribute their goods or services through the same distributors, thus allowing them to use the latter as a vehicle for implementing the collusive equilibrium. RPM makes it generally easier to detect whether a supplier deviates from the collusive equilibrium by cutting its price. This means that if a supplier decided not to enforce its RPM policy with a view to increasing its retail sales, RPM would allow the other suppliers to detect the resulting retail price decrease more easily and react accordingly.

(c) RPM may facilitate collusion between buyers at the distribution level. The resulting loss of price competition seems particularly problematic when RPM is inspired by the buyers. Strong or well organised buyers may be able to force or convince one or more of their suppliers to fix their resale price above the competitive level, thereby helping the buyers reach or stabilise a collusive equilibrium. RPM serves as a commitment device for retailers not to deviate from the collusive equilibrium through discounting prices.

(d) RPM may reduce the pressure on the supplier’s margin, in particular where the manufacturer has a commitment problem, that is, where it has an interest in lowering the price charged to subsequent distributors. In such a situation, the manufacturer may prefer to agree to RPM, so as to help it to commit not to lower the price for subsequent distributors and to reduce the pressure on its own margin.

(e) By avoiding price competition between distributors, RPM may prevent or hinder the entry and expansion of more efficient or new distribution formats, thus reducing innovation at the distribution level.

(f) RPM may be implemented by a supplier with market power to foreclose smaller rivals. The increased margin that RPM may offer distributors may entice them to favour the supplier’s brand over rival brands when advising customers, even where such advice is not in the interest of these customers, or not to sell these rival brands at all.

However, RPM may also lead to efficiencies, in particular where it is supplier driven. If undertakings invoke Article 101(3) claiming that RPM may lead to efficiencies, it is for them to put forward concrete evidence to substantiate this claim and to show that the conditions of Article 101(3) are indeed fulfilled in the individual case. Three examples of such an efficiency defence are set out below.

(a) When a manufacturer introduces a new product, RPM may be an efficient means to induce distributors to better take into account the manufacturer’s interest to promote this product, in particular if it is a completely new product, and to increase sales efforts. If the distributors on the respective market face competitive pressure, this pressure may induce them to expand overall demand for the product and make the launch of the product a success, also for the benefit of consumers. Article 101(3) requires that less restrictive means do not exist. To meet this requirement, suppliers may, for example, demonstrate that it
is not feasible in practice to impose on all buyers effective promotion requirements by contract. Under such circumstances, the imposition of fixed or minimum retail prices for a limited period of time in order to facilitate the introduction of a new product may be considered on balance pro-competitive.

(b) Fixed resale prices, and not just maximum resale prices, may be necessary to organise a coordinated short term low price campaign (of 2 to 6 weeks in most cases), which will also benefit consumers. In particular, they may be necessary to organise such a campaign in a distribution system in which the supplier applies a uniform distribution format, such as a franchise system. Given its temporary character, the imposition of fixed retail prices may be considered on balance pro-competitive.

(c) In some situations, the extra margin provided by RPM may allow retailers to provide (additional) pre-sales services, in particular in case of experience or complex products. If enough customers take advantage of such services to make their choice but subsequently purchase at a lower price with retailers that do not provide such services (and hence do not incur these costs), high-service retailers may reduce or eliminate these services that enhance the demand for the supplier’s product. RPM may help to prevent such free-riding at the distribution level. The supplier will have to convincingly demonstrate that the RPM agreement is necessary in order to overcome free riding between retailers on these services. In this case, the likelihood that RPM is found pro-competitive is higher when competition between suppliers is fierce and the supplier has limited market power.

(183) The safe harbour provided by the VBER covers recommending a resale price to a reseller or requiring the reseller to respect a maximum resale price when the market share of each of the parties to the agreement does not exceed the 30% threshold, provided it does not amount to a minimum or fixed sales price as a result of pressure from, or incentives offered by, any of the parties, as set out in paragraphs (172) to (173) of these Guidelines. The remainder of this section provides guidance for the assessment of recommended or maximum prices above the market share threshold.

(184) The possible competition risk of recommended and maximum prices is that they will work as a focal point for the resellers and might be followed by most or all of them. Moreover, recommended and maximum prices may soften competition or facilitate collusion between suppliers.

(185) An important factor for assessing possible anti-competitive effects of recommended or maximum resale prices is the market position of the supplier. The stronger the market position of the supplier, the higher the risk that a recommended or maximum resale price leads to a more or less uniform application of that price level by the resellers, because they may use it as a focal point. They may find it difficult to deviate from what they perceive to be the preferred resale price proposed by such an important supplier on the market.

(186) Where appreciable anti-competitive effects are established for recommended or maximum resale prices, the question of a possible exemption under Article 101(3) arises. For maximum resale prices, avoiding double marginalisation, may be particularly relevant. A maximum resale price may also help ensure that the brand in question competes more forcefully with other brands, including own label products, distributed by the same distributor.
6.1.2. **Hardcore restrictions pursuant to Article 4(b) to (d) VBER**

6.1.2.1. General principles pursuant to Article 4(b) to (d) VBER

(187) Article 4(b) to (d) VBER provides a list of hardcore restrictions and exceptions that apply depending on the distribution system operated by the supplier: exclusive distribution, selective distribution or free distribution. The hardcore restrictions set out in Article 4(b), 4(c)(i) and (d) of the VBER concern agreements or concerted practices that, directly or indirectly, in isolation or in combination with other factors under the control of the parties, have as their object the restriction of sales by a buyer or its customers, in as far as those restrictions relate to the territory into which or the customer groups to whom the buyer or its customers may sell the contract goods or services. Article 4(c)(ii) and (iii) of the VBER provide that, in a selective distribution system, the restriction of cross-supplies between the members of the selective distribution system operating at the same or different levels of trade as well as the restriction of active or passive sales to end users by members of the selective distribution system operating at the retail level of trade constitute hardcore restrictions.

(188) Article 4(b) to (d) VBER applies irrespective of the sales channel used. Vertical agreements which, directly or indirectly, in isolation or combination with other factors, have as their object, to prevent the buyers or their customers from effectively using the internet for the purposes of selling their goods or services online, restrict the territories into which or the customer groups to whom the buyers or their customers may sell the contract goods or services, as they restrict sales to customers located outside the physical trading area of the buyers or their customers. A ban of online sales, as well as restrictions de facto banning or limiting online sales to the extent that these de facto deprive buyers and their customers from effectively using the Internet to sell their goods or services online, have as their object to prevent the buyers or their customers from effectively using the internet to sell their goods or services online. Therefore, a restriction capable of significantly diminishing the overall amount of online sales in the market constitutes a hardcore restriction of active or passive sales within the meaning of Article 4(b) to (d) VBER. The assessment of whether a restriction is hardcore cannot depend on market-specific circumstances or the individual circumstances of one or specific customers. Restrictions that prevent the effective use of one or more online advertising channels by the buyers or their customers have as their object to prevent the buyers or their customers from effectively using the internet to sell their goods or services online and thus restrict sales to customers wishing to purchase online and located outside the physical trading area of the buyers or their customers, as they limit the buyers’ or their customers’ ability to target them, inform them of their offering and to attract them to their online shop or other channels.

(189) These hardcore restrictions may be the result of direct obligations, such as the obligation not to sell to certain customers or to customers in certain territories or the obligation to refer orders from these customers to other distributors. It may also result from indirect measures aimed at inducing the distributor not to sell to such customers, such as:

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82 See also judgement in Case C-439/09 Pierre Fabre Dermo-Cosmetique SAS v Président de l’Autorité de la concurrence EU:C:2011:649, paragraph 54.
(a) the requirement to request the supplier’s prior approval;\textsuperscript{84}

(b) the refusal or reduction of bonuses or discounts,\textsuperscript{85} and compensatory payments by the supplier if the distributor stops sales to such customers;

(c) the termination of supply;

(d) the limitation or reduction of supplied volumes, for instance, to the demand within the allocated territory or of the allocated customer group;

(e) the threat of contract termination\textsuperscript{86} or non-renewal;

(f) the threat or carrying out of audits to verify compliance with the request not to sell to certain customer groups or to customers in certain territories;

(g) requiring a higher price for products to be sold to certain customer groups or to customers in certain territories;

(h) limiting the proportion of sales to certain customer groups or to customers in certain territories;

(i) limiting the languages to be used on the packaging or for the promotion of the products;

(j) the supply of another product in return for stopping such sales

(k) payments to stop such sales;

(l) the obligation to pass-on to the supplier profits from such sales.

(190) It may further result from the supplier not providing a Union-wide guarantee service, whereby the supplier normally reimburses all distributors for providing a mandatory guarantee service, even in relation to products sold by other distributors into their territory.\textsuperscript{87}

(191) The practices mentioned in paragraphs (187) and (189) of these Guidelines are more likely to be considered a restriction of the buyer’s sales when used by the supplier in conjunction with a monitoring system aimed at verifying the destination of the supplied goods, such as the use of differentiated labels, specific language clusters or serial numbers.

(192) In addition to the direct and indirect obligations laid down in (187) to (190) of these Guidelines, hardcore restrictions specifically related to online sales may similarly be the result of direct or indirect obligations. Besides a direct prohibition to use the internet as a sales channel, the following are further examples of obligations, directly or indirectly, having the object to prevent distributors from effectively using the

\textsuperscript{84} See for example judgement in Case T-77/92 Parker Pen v Commission EU:T:1994:85, paragraph 37.

\textsuperscript{85} See for example judgment in Case T-450/05 Peugeot Nederland v Commission EU:T:2009:262, paragraph 47.


\textsuperscript{87} If the supplier decides not to reimburse its distributors for services rendered under the Union-wide guarantee, it may be agreed with these distributors that a distributor which makes a sale outside its allocated territory will have to pay the distributor authorised in the territory of destination a fee based on the cost of the services to be carried out, including a reasonable profit margin. This type of scheme may not be seen as a restriction of the distributors' sales outside their territory (see judgment of the Court of First Instance in Case T-67/01 JCB Service v Commission [2004] ECR II-49, paragraphs 136 to 145).
internet to sell their goods or services online anywhere, in certain territories or to certain customer groups:

(a) a requirement that the distributor, irrespective of the distribution system it operates, shall prevent customers located in another territory from viewing its website or shall automatically re-route its customers to the manufacturer's or other distributors' websites. This does not exclude an obligation on the distributor to offer on its website links to websites of other distributors and/or the supplier;\(^88\)

(b) a requirement that the distributor, irrespective of the distribution system it operates, shall terminate consumers' online transactions once their credit card data reveal an address that is not within the distributor's territory;\(^89\)

(c) a requirement that the distributor shall only sell in a physical space or in the physical presence of specialised personnel;\(^90\)

(d) a requirement that the distributor shall seek the supplier's prior authorisation for selling online;

(e) a requirement that the distributor shall not use the supplier's trademarks or brand names on its website;

(f) a direct or indirect prohibition to use a specific online advertising channel, such as price comparison tools or advertising on search engines, or other online advertising restrictions indirectly prohibiting the use of a specific online advertising channel, such as an obligation on the distributor not to use the suppliers' trademarks or brand names for bidding to be referenced in search engines, or a restriction to provide price related information to price comparison tools. While a prohibition in the use of one specific price comparison tool or search engine would typically not prevent the effective use of the internet for the purposes of selling online, as other price comparison tools or search engines could be used to raise awareness of a buyer’s online sales activities, a prohibition in the use of all most widely used advertising services in the respective online advertising channel could amount to such prevention, if the remaining price comparison tools or search engines are de facto not capable to attract customers to the buyer’s online shop.

(193) By contrast, under the VBER the suppliers are allowed to give certain instructions to their distributors on how their products are to be sold. It is permissible for a supplier to impose quality requirements on distributors irrespective of the distribution model applied. The modalities of sales that do not have as their object the restriction of the

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territory into which and the customer groups to whom the product and service may be sold can be agreed upon by the suppliers and its distributors. For instance, vertical agreements that contain quality requirements, notably in the context of selective distribution, such as the minimum size of the shop, quality requirements for the set-up of the shop (e.g. with respect to fixtures, furnishing, design, lightening and floor coverings), quality requirements for the look and feel of the website, product presentation requirements (e.g. the minimum number of colour options displayed next to each other or of the brand's products exposed, and the minimum space requirement between products, product lines and brands in the shop), are covered by the VBER.\(^91\)

Vertical agreements including a restriction on the use of a specific online sales channel, such as online marketplaces, or setting quality standards for selling online, can benefit from the block exemption, irrespective of the distribution system used by the supplier in as far as such restriction does not, directly or indirectly, in isolation or combination with other factors, have as its object, to prevent the buyers or their customers from effectively using the internet for the purposes of selling their goods or services online or from effectively using one or more online advertising channels, as explained in paragraph (188) above. These restrictions do not affect a group of customers which can be circumscribed within all potential customers nor the buyers’ or their customers’ ability to operate their own websites and to advertise via the Internet on price comparison tools or online search engines, enabling buyers or their customers to raise awareness of their online activities and attract potential customers. Therefore, unless they have the indirect object of preventing the effective use of the internet for the purposes of selling online, such sales restrictions do not amount to a restriction of the territories into which or the customers to whom the distributors or their customers can sell the contract goods or services. Such block-exempted restrictions in principle include:

(a) a direct or indirect ban on sales on online marketplaces;\(^92\)

(b) a requirement that the buyer operates one or more brick and mortar shops or showrooms as a condition for becoming a member of the supplier’s distribution system;

(c) a requirement that the buyer sells at least a certain absolute amount (in value or volume, but not in proportion of its total sales) of the contract goods or services offline to ensure an efficient operation of its brick and mortar shop. This absolute amount of required offline sales can be the same for all buyers, or determined individually for each buyer on the basis of objective criteria, such as the buyer's size in the network or its geographic location.

A requirement that the same buyer pays a different price for products intended to be resold online than for products intended to be resold offline can benefit from the safe harbour of the VBER, in so far as it has as its object to incentivise or reward the appropriate level of investments respectively made online and offline. Such difference in price should be related to the differences in the costs incurred in each channel by the distributors at retail level. To that end, the wholesale price difference


\(^92\) Case C-230/16 Coty Germany GmbH v Parfümerie Akzente GmbH ECLI:EU:C:2017:941, paragraphs 64-69; see also section 8.2.3. of these Guidelines.
should take into account the different investments and costs incurred by a hybrid distributor so as to incentivise or reward that hybrid distributor for the appropriate level of investments respectively made online and offline, as where the wholesale price difference is entirely unrelated to the difference in costs incurred in each channel, such price difference is unlikely to bring about efficiency-enhancing effects. Therefore, where the wholesale price difference has as its object to prevent the effective use of the internet for the purposes of selling online it amounts to a hardcore restriction, as set out in paragraph (188) of these Guidelines. This would, in particular, be the case where the price difference makes the effective use of the internet for the purposes of selling online unprofitable or financially not sustainable.

(196) Online advertising restrictions in vertical agreements benefit from the block exemption as long as they do not, directly or indirectly, have as their object to prevent the buyers or their customers from effectively using the internet for the purposes of selling their goods or services online, namely they do not directly or indirectly prevent the effective use of one or more specific online advertising channels. Examples of online advertising restrictions benefitting from the safe harbour of the VBER include a requirement that online advertising meets certain quality standards or includes specific content or information, or a requirement that the buyer does not use the services of individual online advertising providers not meeting certain quality standards.

6.1.2.2. Distinction between active and passive sales

(197) A restriction of the territory or customer group into which a buyer or its customers can sell the contract goods or services can concern active or passive sales into that territory or to those customers. Article 1(l) and (m) VBER provides the definitions of active and passive sales.

(198) Article 1(m) VBER provides that selling to customers who have not been actively targeted by setting up one’s own website or online shop, irrespective of whether on an own server or hosted on a third party server, qualifies as passive sales, as it is a way to allow potential customers to reach a particular distributor. The use of a website may have effects that extend beyond the distributor’s own territory and customer group, for instance, by enabling online purchases by customers located outside the physical trading area of the distributor. If, absent any active targeting by the distributor of a specific territory or customer group, a customer from that territory or customer group visits the website of a distributor and contacts the distributor, and if such contact leads to a sale, including delivery, this is considered passive selling, as the customer’s access to the distributor’s website stems from the effective use of the internet by the customer. The same applies if a customer opts to be kept automatically informed by the distributor and such information leads to a sale. Similarly, using search engine optimisation techniques on a website, namely using tools or techniques intended to improve the ranking of that website on search engines, is a form of passive selling.

(199) Conversely, offering on a website or online shop, language options different than the ones commonly used in the territory in which the distributor is established normally indicates that the distributor’s activities are directed at the territory in which that language is commonly used and thus amounts to a form of active selling.\footnote{Judgment in Cases C-585/08 and C-144/09, Peter Pammer v Reederei Karl Schlüter GmbH & Co. KG and Hotel Alpenhof GesmbH v Oliver Heller, ECLI:EU:C:2010:740, paragraph 93.}
on a website or online shop an English language option is not considered as indicating that the distributor’s activities are directed at English-speaking territories, as English are commonly used in EU Member States. Similarly, setting up one’s own website or online shop with a domain name corresponding to a territory other than the one in which the distributor is established is a form of active selling into that territory, while offering a website or online shop with a generic and non-country specific domain name is considered a form of passive selling.

(200) Targeted online advertising or promotion is a form of active selling. In particular, in many instances, online advertising allows the distributor to determine in advance the audience that will be seeing its online advertising and thus to select the territories or customer groups that would be targeted by its advertisement. Targeted online advertising reaching customers within an exclusive territory or an exclusive customer group allocated to other distributors can thus be restricted. This includes, for instance, personalised advertising targeting customers in the exclusive territory or customer group or bidding for paid referencing on a search engine targeting an exclusive territory or customer group or any other form of online advertising enabling the distributor to design the advertisement so as to target or exclude customers in exclusive territories or customer groups. By contrast, online advertising or promotion which is meant to reach customers in a distributor’s own territory or customer group but which cannot be limited to that territory or customer group, is considered a form of passive selling, to the extent that it is not designed to target customers across specific territories or customer groups. Examples of such general advertising is sponsored content on a website of a local or national newspaper that may be accessed by any visitor of that website, or the use of price comparison tools with generic and not country-specific domain names. Conversely, if such general advertising is made in languages not commonly used in the territory in which the distributor is established or on websites with domain names corresponding to a territory other than the one in which the distributor is established, it is a form of active selling into that territory, as it would no longer be meant to reach customers in the distributor’s own territory. The participation in public procurement is categorised as a form of passive selling irrespective of the type of the public procurement procedure (e.g. open procedure, restricted procedure). This qualification is coherent with public procurement law. If the participation in a public tender was to be qualified as active sale, intra-brand competition would be significantly reduced in such markets, thus contradicting the rationale of public procurement law which includes facilitating intra-brand competition. As a result, restricting the participation of a buyer in public procurement is be a hardcore restriction under Article 4(b) to (d) VBER. Similarly, responding to private tenders is a form of passive selling. A private tender is a form of unsolicited sales request addressed to multiple potential suppliers and the submission of a bid in response to a private tender is therefore passive selling.

(201) As set out in Article 1(1)(n) VBER, in the context of restrictions amounting to a “restriction of active or passive sales” according to Article 4 VBER, all forms of selling other than those defined as passive sales in the VBER and further explained in these Guidelines are considered active sales.
6.1.2.3. Application of the general principles

(202) Article 4(b) to (d) VBER provides a list of hardcore restrictions and exceptions that apply depending on the distribution system operated by the supplier: exclusive distribution, selective distribution or free distribution.

6.1.2.4. Where the supplier operates an exclusive distribution system

(203) The hardcore restriction set out in Article 4(b) VBER concerns agreements or concerted practices that, directly or indirectly, have as their object the restriction of the territory into which or of the customer group to whom a buyer, to which an exclusive territory or customer group has been allocated, may actively or passively sell the contract goods or services.

(204) There are five exceptions to the hardcore restriction laid down in Article 4(b) VBER.

(205) First, Article 4(b)(i) VBER allows the supplier to restrict active sales by an exclusive distributor into a territory or to a customer group exclusively allocated to other buyers, or reserved to the supplier. In order to preserve their investment incentives, the exclusively appointed distributors should be appropriately protected against active sales, including online advertising, into the territory or to the customer group exclusively allocated to them by the other buyers of the supplier within the Union, including buyers to which other territories or customer groups have been exclusively allocated by the supplier. Where the active sales restrictions imposed on other buyers of the supplier do not provide an appropriate level of protection to safeguard the appointed distributor’s incentives to invest in the exclusive territory and thus to justify the establishment of an exclusive distribution system, the benefit of the VBER is likely to be withdrawn.

(206) Sales by an exclusive distributor’s customers into a territory or to a customer group that the supplier has exclusively allocated to other distributors can also undermine the latter distributors’ incentives to invest in quality or demand-enhancing services. To protect the investment incentives of exclusively appointed distributors, the supplier may require that such other distributors, and their customers that have entered into a distribution agreement with the supplier or with a party that was given distribution rights by the supplier, are restricted from engaging in active sales into the exclusively allocated territory or to the exclusively allocated customer group (i.e. to pass on the active sales restriction to the buyer’s customers).

(207) The supplier is allowed to combine the allocation of an exclusive territory and an exclusive customer group by, for instance, appointing an exclusive distributor for a particular customer group in a specific territory.

(208) The protection of exclusively allocated territories or customer groups is not absolute. To prevent market partitioning, passive sales into such territories or to such customer groups cannot be prohibited. However, Article 4(b) VBER only concerns restrictions of sales by the buyer or its customers, which means that the supplier is not prevented from accepting a total or partial restriction, both online and offline, on both active and passive sales into the exclusive territory or to (all or some of) the customers constituting an exclusive customer group.

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94 The pass on is allowed by the VBER when the market share of the supplier party to the contract on the market where it sells the goods or services to the buyer does not exceed 30% and when the market share of the buyer on the market where it purchases the contract goods or services does not exceed 30%.
Second, Article 4(b)(ii) VBER allows the supplier that combines the application of an exclusive distribution system and a selective distribution system in different territories to restrict an exclusive buyer from selling actively or passively to unauthorised distributors located in a territory where the supplier operates a selective distribution system which means that the supplier has either appointed selected distributors or has reserved the territory for the application of such a selective distribution system. The protection of the selective distribution system extends to active and passive sales by the customers of the exclusive buyer, which can also be prevented from selling to unauthorised distributors located inside the selective distribution system.

Third, Article 4(b)(iii) VBER allows a supplier to restrict the place of establishment of the buyer to which an exclusive territory or customer group is allocated (“location clause”). This implies that the benefit of the VBER is not lost if it is agreed that the buyer will restrict its distribution outlet(s) and warehouse(s) to a particular address, place or territory. For a mobile distribution outlet, an area may be defined outside which it cannot be operated. The use by a distributor of an own website cannot be considered comparable to the opening of a new outlet in a different location and thus cannot be restricted.95

Fourth, Article 4(b)(vi) VBER allows a supplier to restrict active and passive sales by an exclusive wholesaler to end users, as the supplier can keep the wholesale and retail levels of trade separate. However, this exception does not preclude the possibility of allowing the wholesaler to sell to certain end users (e.g. a few large ones), while not allowing sales to (all) other end users.

Fifth, Article 4(b)(v) VBER allows a supplier to restrict a buyer of components, to whom the components are supplied for incorporation, from reselling them to competitors of the supplier who would use them to manufacture the same type of goods as those produced by the supplier. The term ‘component’ includes any intermediate goods and the term ‘incorporation’ refers to the use of any input to produce goods.

6.1.2.5. Where the supplier operates a selective distribution system

The hardcore restriction set out in Article 4(c)(i) VBER concerns agreements or concerted practices that, directly or indirectly, have as their object the restriction of the territory into which or the customer groups to whom a selective distributor may actively or passively sell the contract goods or services.

There are five exceptions to the hardcore restriction laid down in Article 4(c)(i) VBER.

The first exception concerns the restriction of active sales by authorised distributors outside the selective distribution system. It allows the supplier to restrict active sales, including online advertising, by authorised distributors into other territories or to customer groups exclusively allocated to one or more distributors or reserved exclusively to the supplier. The supplier can require that the restriction of active sales into an exclusive territory or to an exclusive customer group be passed on by the buyer to its customers that have entered into a distribution agreement with a supplier or with a party that was given distribution rights by the supplier.

The second exception allows a supplier to restrict authorised distributors and customers of these distributors from selling to unauthorised distributors located in any territory where the supplier operates a selective distribution system, which means that the supplier has either appointed selected distributors or has reserved the territory for the application of such a selective distribution system. The restriction may cover active or passive sales, at any level of trade.

The third exception allows the supplier to prevent authorised distributors from operating their business from different premises or from opening a new outlet in a different location (“location clause”). This implies that the benefit of the VBER is not lost if it is agreed that the buyer will restrict its distribution outlet(s) and warehouse(s) to a particular address, place or territory. For a mobile distribution outlet, an area may be defined outside which it cannot be operated. The use by a distributor of an own website cannot be considered comparable to the opening of a new outlet in a different location and thus cannot be restricted.

The fourth exception allows a supplier to restrict active and passive sales by an authorised wholesaler to end users, as the supplier can keep the wholesale and retail levels of trade separate. However, this exception does not preclude the possibility of allowing the wholesaler to sell to certain end users (e.g. a few large ones), while not allowing sales to (all) other end users.

The fifth exception allows a supplier to restrict an authorised buyer of components, to whom the components are supplied for incorporation, from reselling them to competitors of the supplier who would use them to manufacture the same type of goods as those produced by the supplier. The term ‘component’ includes any intermediate goods and the term ‘incorporation’ refers to the use of any input to produce goods.

The hardcore restriction set out in Article 4(c)(iii) VBER excludes the restriction of active or passive sales by members of a selective distribution network to end users, whether professional end users or consumers, without prejudice to the possibility of prohibiting a member of the network from operating out of an unauthorised place of establishment (see the third exception to Article 4(c)(i) and paragraph (217) of these Guidelines). This means that authorised distributors cannot be restricted in the choice of users, or purchasing agents acting on behalf of those users, to whom they may sell, except to protect an exclusive distribution system operated in another territory (see the first exception to Article 4(c)(i) and paragraph (215) of these Guidelines). Within a selective distribution system, the authorised distributors should be free to sell to all end users, both actively and passively.

Considering that online and offline channels have different characteristics, a supplier operating a selective distribution system may impose on its authorised distributors criteria for online sales that are not identical to those imposed for sales in brick and mortar shops, in as far as the criteria imposed for online sales do not, directly or indirectly, in isolation or combination with other factors, have as their object, to prevent the buyers or their customers from effectively using the internet for the purposes of selling their goods or services online. For example, a supplier may establish specific requirements to ensure certain service quality standards for users purchasing online, such as the set-up and operation of an online after-sales help desk, a requirement to cover the costs of customers returning the product or the use of secure payment systems. These restrictions do not affect a group of customers which can be circumscribed within all potential customers nor the buyers’ or their...
customers’ ability to operate their own websites and to advertise via the internet on third-party platforms or online search engines, enabling buyers or their customers to raise awareness of their online activities and attract potential customers.

(222) A selective distribution system cannot be combined with an exclusive distribution system, as defined in Article 1(1)(g) VBER, within the same territory, as this would lead to a hardcore restriction of active or passive sales to end users by the authorised distributors pursuant to Article 4(c)(i) VBER. However, the supplier may commit to supplying only one or a limited number of authorised distributors in a specific part of the territory where the selective distribution system is operated. The supplier may also commit not to make any direct sales itself into that territory. In addition, as allowed by the second exception to Article 4(c)(i) VBER, the supplier may impose a location clause on its authorised distributors.

(223) The hardcore restriction set out in Article 4(c)(ii) VBER concerns the restriction of cross-supplies between authorised distributors within a selective distribution system. This means that the supplier cannot prevent active or passive sales between its authorised distributors, which must remain free to purchase the contract products from other authorised distributors within the network, operating either at the same or at a different level of trade. Consequently, selective distribution cannot be combined with vertical restraints aimed at forcing distributors to purchase the contract products exclusively from a given source. It also means that within a selective distribution network, no restrictions can be imposed on authorised wholesalers as regards their sales to authorised distributors.

6.1.2.6. Where the supplier operates a free distribution system

(224) The hardcore restriction set out in Article 4(d) VBER concerns agreements or concerned practices that, directly or indirectly, have as their object the restriction of the territory into which or the customer groups to whom a buyer may actively or passively sell the contract goods or services.

(225) There are five exceptions to the hardcore restriction laid down in Article 4(d) VBER.

(226) First, Article 4(d)(i) VBER allows the supplier to restrict active sales, including online advertising, by a buyer into a territory or to a customer group reserved exclusively to the supplier or allocated exclusively to other buyers. The supplier can require that the restriction of active sales into an exclusive territory or to an exclusive customer group be passed on by the buyer to its customers that have entered into a distribution agreement with a supplier or with a party that was given distribution rights by the supplier. However, the protection of exclusively allocated territories or customer groups is not absolute, as passive sales into such territories or to such customer groups cannot be prohibited.

(227) Second, Article 4(d)(ii) VBER allows the supplier to restrict a buyer and its customers from selling actively or passively to unauthorised distributors located in a territory where the supplier operates a selective distribution system or which the supplier has reserved for the operation of such a selective distribution system. The restriction may cover active or passive sales at any level of trade.

(228) Third, Article 4(d)(iii) VBER allows a supplier to restrict the place of establishment of a buyer (“location clause”). This implies that the benefit of the VBER is not lost if

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96 See, for example, Commission decision in case AT.40182 - Guess, paragraphs 65 to 78.
it is agreed that the buyer will restrict its distribution outlet(s) and warehouse(s) to a particular address, place or territory. For a mobile distribution outlet, an area may be defined outside which it cannot be operated. The use by a distributor of its own website cannot be considered comparable to the opening of a new outlet in a different location and thus cannot be restricted.\footnote{\textit{See judgment in Case C-439/09 Pierre Fabre Dermo-Cosmetique SAS v Président de l’Autorité de la concurrence} EU:C:2011:649, paragraphs 56-57.}

(229) Fourth, Article 4(d)(vi) VBER allows a supplier to restrict active and passive sales by a wholesaler to end users, as the supplier may keep the wholesale and retail levels of trade separate. However, this exception does not exclude the possibility of allowing the wholesaler to sell to certain end users (e.g. a few large ones), while prohibiting it from selling to other end users.

(230) Fifth, Article 4(d)(v) VBER allows a supplier to restrict a buyer of components, to whom the components are supplied for incorporation, from reselling them to competitors of the supplier, which would use them to manufacture the same type of goods as those produced by the supplier. The term ‘component’ includes any intermediate goods and the term ‘incorporation’ refers to the use of any input to produce goods.

6.1.3. Restrictions of the sales of spare parts

(231) The hardcore restriction set out in Article 4(e) VBER concerns agreements that prevent or restrict end users, independent repairers, wholesalers and service providers from obtaining spare parts directly from the manufacturer of those spare parts. An agreement between a manufacturer of spare parts and a buyer that incorporates those parts into its own products, such as original equipment manufacturers (OEMs), may not, either directly or indirectly, prevent or restrict sales by the OEM of those spare parts to end users, independent repairers, wholesalers or service providers. Indirect restrictions may arise particularly when the supplier of the spare parts is restricted in supplying technical information and special equipment, which are necessary for the use of spare parts by users, independent repairers or service providers. However, the agreement may place restrictions on the supply of the spare parts to the repairers or service providers entrusted by the OEM with the repair or servicing of its own goods. This means that the OEM may require its own repair and service network to buy spare parts from itself or from other members of its selective distribution system, where it operates such a system.

6.2. Restrictions that are excluded from the VBER

(232) Article 5 VBER excludes certain obligations found in vertical agreements from the coverage of the VBER irrespective of whether the market share threshold in Article 3(1) VBER is exceeded or not. Article 5 VBER defines obligations for which it cannot be assumed with sufficient certainty that they fulfil the conditions of Article 101(3). There is no presumption that the obligations specified in Article 5 VBER fall within the scope of Article 101(1) or fail to satisfy the conditions of Article 101(3). The exclusion of these obligations from the VBER means only that they are subject to an individual assessment under Article 101. Moreover, unlike Article 4 VBER, the exclusion from the block exemption provided by Article 5 VBER is limited to the specific obligation, if that obligation can be
severed from the rest of the vertical agreement. This means that the remainder of the vertical agreement continues to benefit from the block exemption.

6.2.1. Non-compete obligations exceeding a duration of five years

(233) Pursuant to Article 5(1)(a) VBER, non-compete obligations exceeding a duration of five years are excluded from the benefit of the VBER. Non-compete obligations are arrangements that cause the buyer purchasing from the supplier or from another undertaking designated by the supplier more than 80% of the buyer’s total purchases of the contract goods and services and their substitutes during the preceding calendar year, as defined by Article 1(1)(e) VBER. This means that the buyer is prevented from purchasing competing goods or services or that such purchases are limited to less than 20% of its total purchases. If no relevant data is available for the buyer’s purchases in the calendar year preceding the conclusion of the vertical agreement, the buyer’s best estimate of its annual total requirements may be used instead. However actual purchasing data should be used as soon as it is available.

(234) Non-compete obligations are not covered by the block exemption if their duration is indefinite or exceeds five years. Non-compete obligations that are tacitly renewable beyond a period of five years are covered by the block exemption, provided that the buyer can effectively renegotiate or terminate the vertical agreement containing the obligation with a reasonable notice period and at a reasonable cost, thus allowing the buyer to effectively switch its supplier after the expiry of the five-year period. If, for instance, the vertical agreement provides for a five-year non-compete obligation and the supplier provides a loan to the buyer, the repayment of that loan should not hinder the buyer from effectively terminating the non-compete obligation at the end of the five-year period. Similarly, when the supplier provides the buyer with equipment which is not relationship-specific, the buyer should have the possibility to take over the equipment at its market asset value once the non-compete obligation expires.

(235) Pursuant to Article 5(2) VBER, the five-year duration limit does not apply when the contract goods or services are resold by the buyer “from premises and land owned by the supplier or leased by the supplier from third parties not connected with the buyer”. In such cases, the non-compete obligation may be of the same duration as the period of occupancy of the point of sale by the buyer. The reason for this exception is that it is normally unreasonable to expect a supplier to allow competing products to be sold from premises and land owned by the supplier without its permission. By analogy, the same principles apply where the buyer operates from a mobile outlet owned or leased by the supplier from third parties not connected with the buyer. Artificial ownership constructions, such as a transfer by the distributor of its proprietary rights over the land and premises to the supplier for only a limited period, intended to avoid the five-year limit cannot benefit from this exception.

6.2.2. Post term non-compete obligations

(236) Pursuant to Article 5(1)(b) in conjunction with Article 5(3) VBER, post-term non-compete obligations on the buyer are excluded from the VBER, unless the obligation is indispensable to protect know-how transferred by the supplier to the buyer, and is limited to the point of sale from which the buyer has operated during the contract period, and is limited to a maximum period of one year. This is only the case where the know-how is substantial within the meaning of Article 1(1)(h) VBER. This means that the know-how must include information that is significant and useful to the buyer for the use, sale or resale of the contract goods or services.
6.2.3. **Non-compete obligations imposed on members of a selective distribution system**

(237) Article 5(1)(c) VBER concerns the sale of competing goods or services in a selective distribution system. The VBER covers the combination of selective distribution with a non-compete obligation, requiring authorised distributors not to resell competing brands. However, if the supplier prevents its authorised distributors, either directly or indirectly, from buying products for resale from one or more specific competing suppliers, such an obligation is not covered by the block exemption. The objective of excluding this type of obligation is to avoid a situation whereby a number of suppliers using the same selective distribution outlets prevent one or more specific competitors from using these outlets to distribute their products. Such a scenario would amount to foreclosure of a competing supplier through a form of collective boycott.

6.2.4. **Parity obligations**

(238) The fourth exclusion from the block exemption, which is set out in Article 5(1)(d) VBER, concerns retail parity obligations imposed by suppliers of online intermediation services which cause buyers of those services not to offer, sell or resell goods or services to end users under more favourable conditions using competing online intermediation services. The end users may be undertakings or final consumers. The conditions may concern prices, inventory, availability or any other terms or conditions of offer or sale. The parity obligation may be express or it may be applied by other direct or indirect means, including the use of differential pricing or other incentives or measures whose application depends on the conditions under which the buyer of the online intermediation services offers goods or services to end users using competing suppliers of online intermediation services. For example, a supplier of online intermediation services may incentivise buyers to grant it parity relative to competing suppliers of such services by offering better visibility for the buyer’s goods or services on its website or by charging lower commission rates.

(239) All other types of parity obligation are covered by the block exemption of the VBER. This includes, for example, retail parity obligations relating to the direct sales or marketing channels of suppliers of goods or services (so-called ‘narrow’ parity); parity obligations relating to the conditions under which goods or services are offered to undertakings that are not end users, and parity obligations relating to the conditions under which manufacturers, wholesalers or retailers purchase goods or services as inputs (see section 8.2.5. of these Guidelines for the assessment of parity obligations in individual cases where the VBER does not apply).

7. **WITHDRAWAL AND NON-APPLICATION**

7.1. **Withdrawal of the benefit of the VBER (Article 29 Regulation 1/2003)**

(240) The Commission may withdraw the benefit of the VBER pursuant to Article 29(1) of Regulation 1/2003, if it finds that, in a particular case, a vertical agreement to which the VBER applies has certain effects that are incompatible with Article 101(3). Moreover, if, in a particular case, such an agreement has effects that are incompatible with Article 101(3) in the territory of a Member State, or in a part thereof, which has all the characteristics of a distinct geographic market, the NCA of that Member State may also withdraw the benefit of the VBER, pursuant to Article 29(2) of Regulation...
1/2003. Article 29 of Regulation 1/2003 does not mention the courts of the Member States, who therefore have no power to withdraw the benefit of the VBER, unless the court concerned is a designated competition authority of a Member State pursuant to Article 35 of Regulation 1/2003.

(241) The Commission and the NCAs may withdraw the benefit of the VBER in two scenarios. Firstly, they may withdraw the benefit of the VBER if a vertical agreement falling within the scope of Article 101(1) has in isolation effects on the relevant market which are incompatible with Article 101(3). Secondly, as referred to in recital 18 of the VBER, they may also withdraw the benefit of the VBER if the vertical agreement has these effects in conjunction with similar agreements entered into by competing suppliers or buyers. This is because parallel networks of similar vertical agreements can produce cumulative effects that are incompatible with Article 101(3). The restriction of access to the relevant market and the restriction of competition therein are examples of such cumulative effects that can justify a withdrawal of the benefit of the VBER.

(242) Parallel networks of vertical agreements are to be regarded as similar if they contain the same type of restrictions producing similar effects on the market. Such cumulative effects may arise, for example, in the case of shared exclusivity or selective distribution, from parity obligations or non-compete obligations. As regards selective distribution, a situation of sufficiently similar parallel networks may exist if, on a given market, certain suppliers apply purely qualitative selective distribution while other suppliers apply quantitative selective distribution, with similar effects on the market. Such cumulative effects may also arise when, on a given market, parallel selective distribution networks use qualitative criteria that foreclose distributors. In these circumstances, the assessment must take account of the anti-competitive effects attributable to each individual network of agreements. Where appropriate, the withdrawal of the benefit of the VBER may be limited to particular qualitative criteria or particular quantitative criteria which, for example, limits the number of authorised distributors.

(243) The responsibility for an anti-competitive cumulative effect can only be attributed to those undertakings that make an appreciable contribution to it. Agreements entered into by undertakings whose contribution to the cumulative effect is insignificant do not fall under the prohibition of Article 101(1). They are therefore not subject to the withdrawal mechanism.

(244) Pursuant to Article 29(1) of Regulation 1/2003, the Commission may withdraw the benefit of the VBER on its own initiative or on the basis of a complaint. This includes the possibility for NCAs to ask the Commission to withdraw the benefit of

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98 Nor may the courts of the Member States modify the scope of VBER, by extending its sphere of application to agreements not covered by the VBER. Any such extension, whatever its scope, would affect the manner in which the Commission exercises its legislative competence (judgment in Case C-234/89 Stergios Delimitis v Henninger Bräu AG EU:C:1991:91, paragraph 46).

99 However, a cumulative foreclosure effect is unlikely to exist if the parallel networks of vertical agreements cover less than 30% of the relevant market, see De Minimis Notice, paragraph 10.

100 Individual suppliers or distributors with a market share not exceeding 5%, are in general not considered to contribute significantly to a cumulative foreclosure effect, see De Minimis Notice, paragraph 10; and judgment in Case C-234/89 Stergios Delimitis v Henninger Bräu AG EU:C:1991:91, paragraphs 24 to 27.

101 The assessment of such a contribution will be made in accordance with the criteria set out in enforcement policy in individual cases, as set out in section 8. of these Guidelines.
the VBER in a particular case, without prejudice to the application of the rules on case allocation and assistance within the European Competition Network, and without prejudice to their own withdrawal power pursuant to Article 29(2) of Regulation 1/2003. If at least three NCAs ask the Commission to apply Article 29(1) of Regulation 1/2003 in a particular case, the Commission will discuss the case within the framework of the ECN with a view to deciding whether or not to withdraw the benefit of the VBER. In this context, the Commission will take utmost account of the views of the NCAs that have asked the Commission to withdraw the benefit of the VBER to reach a timely conclusion on whether the conditions for a withdrawal in the specific case are fulfilled.

(245) It follows from Article 29(1) and (2) of Regulation 1/2003 that the Commission has the exclusive competence to withdraw Union-wide in that it may withdraw the benefit of the VBER in respect of vertical agreements restricting competition on a relevant geographic market which is wider than the territory of a single Member State, whereas NCAs may only withdraw such benefits in relation to the territory of their respective Member State.

(246) Therefore, the withdrawal power of an individual NCA relates to cases where the relevant market covers one single Member State, or a region located exclusively in the respective Member State. In such a case, the NCA of that Member State has the competence to withdraw the benefit of the VBER in relation to the vertical agreement that has effects that are incompatible with Article 101(3) on this national or regional market. This is a concurrent competence in that Article 29(1) VBER also empowers the Commission to withdraw the benefit of the VBER in relation to a national or regional market, provided the vertical agreement at hand may affect trade between Member States.

(247) Where several separate national or regional markets are concerned, several competent NCAs can withdraw the benefit of the VBER in parallel.

(248) It follows from the wording of Article 29(1) of Regulation 1/2003 that, where the Commission withdraws the benefit of the VBER, it has the burden of proving firstly that the VBER applies to the respective vertical agreement, which means that it must fall within the scope of Article 101(1), and secondly that this agreement has effects that are incompatible with Article 101(3), which means that it fails to fulfil at least one of the four conditions of Article 101(3). Pursuant to Article 29(2) of Regulation 1/2003, the same requirements apply where a NCA withdraws the benefit of the VBER in relation to its Member State. In particular, as regards the burden of proving that the second requirement is fulfilled, Article 29 requires the competent

102 See Chapter IV of Regulation 1/2003.
103 If a vertical agreement falls outside the scope of Article 101(1), as set out in section 3. Of these Guidelines, the question of the application of the VBER does not arise because the VBER is meant to define categories of vertical agreements that normally satisfying the conditions laid down in Article 101(3), which presupposes that a vertical agreement falls within the scope of Article 101(1), see the explicit reference in Article 101(3), to agreements, decisions and concerted practices, as well as Article 101(1).
104 It is sufficient for the Commission to substantiate that one of the four conditions of Article 101(3) is not fulfilled. This is because, for the Article 101(3) exemption, all four conditions must be met.
competition authority to substantiate that at least one of the four conditions of Article 101(3) is not met.\(^{105}\)

(249) If the requirements of Article 29(1) of Regulation 1/2003 are fulfilled, the Commission may withdraw the benefit of the VBER in an individual case. Such a withdrawal, and its requirements as set out in the previous paragraphs, must be distinguished from the findings in a Commission decision pursuant to Chapter III of Regulation 1/2003. However, a withdrawal can be combined, for example, with the finding of an infringement and imposition of a remedy, and even with interim measures, as done in previous Commission decisions.\(^{106}\)

(250) If the Commission withdraws the benefit of the VBER pursuant to Article 29(1) of Regulation 1/2003, it has to take into account that the withdrawal can only have ex nunc effects, i.e. the exempted status of the agreements concerned will remain unaffected for the period preceding the date at which the withdrawal becomes effective. In the case of a withdrawal pursuant to Article 29(2) of Regulation 1/2003, the NCAs concerned must also take into account its obligations under Article 11(4) of Regulation 1/2003, in particular to provide the Commission with any relevant envisaged decision.

7.2. Regulation declaring that the VBER does not apply (Article 6 VBER)

(251) In accordance with Article 1a Empowerment Regulation, Article 6 VBER enables the Commission to exclude from the scope of the VBER, by means of regulation, parallel networks of similar vertical restraints where these cover more than 50% of a relevant market. Such a measure is not addressed to individual undertakings but concerns all undertakings whose agreements fulfil the conditions set out in a regulation referred to in Article 6 of the VBER. When assessing the need to adopt such a regulation, the Commission will consider whether an individual withdrawal would be a more appropriate remedy. The number of competing undertakings contributing to a cumulative effect on a market and the number of affected geographic markets within the Union are two aspects that are particularly relevant in this assessment.

(252) The Commission will consider the adoption of a regulation pursuant to Article 6 VBER if similar restraints that cover more than 50% of the relevant market are likely to appreciably restrict access to this market or competition therein. This may in particular be the case when parallel selective distribution networks covering more than 50% of a market are liable to foreclose the market due to the use of selection criteria which are not required by the nature of the relevant goods or services or

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\(^{105}\) The requirement under Article 29 of Regulation 1/2003 regarding the burden of proof of the competent competition authority follows from the situation in which the VBER does not apply and an undertaking invokes Article 101(3) in an individual case. In such a situation, the undertaking has the burden of proof pursuant to Article 2 of Regulation 1/2003 to show that all four conditions of Article 101(3) are met. To this end, it must substantiate its claims, see e.g. Commission Decision in AT.39226 *Lundbeck*, upheld in judgments in Case T-472/13 *Lundbeck v Commission* EU:T:2016:449, and Case C-591/16 *P Lundbeck v Commission*.

\(^{106}\) The Commission has used its power to withdraw the benefit of one of the previously applicable block exemption regulations in the Commission decisions of 25 March 1992 (interim measures), and of 23 December 1992 relating to a proceeding under Article 85 of the EEC Treaty in Case IV/34.072 – Mars/Langnese and Schöller upheld by judgment in Case C-279/95 *P Langnese-Iglo v Commission* EU:C:1998:447, and the Commission decisions of 4 December 1991 (interim measures), and of 4 December 1991 relating to a proceeding under Article 85 of the EEC Treaty in Case IV/33.157 – Eco System/Peugeot.
which discriminate against certain forms of distribution of such goods or services. To calculate the 50% market coverage ratio, account must be taken of each individual network of vertical agreements containing restraints, or combinations of restraints, producing similar effects on the market. However, Article 6 VBER does not require the Commission to act where the 50% market-coverage ratio is exceeded.

(253) The effect of a regulation adopted pursuant to Article 6 VBER is that the VBER becomes inapplicable in respect of the restraints and the markets concerned, and that Article 101(1) and (3) therefore apply fully.

(254) Any regulation referred to in Article 6 VBER must clearly set out its scope. Therefore, the Commission must firstly define the relevant product and geographic market(s), and secondly the type of vertical restraint in respect of which the VBER will no longer apply. As regards the latter aspect, the Commission may modulate the scope of the regulation according to the competition concern that it intends to address. For instance, while all parallel networks of single-branding type arrangements may be taken into account in view of establishing the 50% market coverage ratio, the Commission may nevertheless restrict the scope of a regulation adopted pursuant to Article 6 VBER to non-compete obligations exceeding a certain duration. Thus, agreements of a shorter duration or of a less restrictive nature might be left unaffected, in consideration of the lesser degree of foreclosure attributable to such restraints. Similarly, if, on a particular market, undertakings practice selective distribution in combination with additional restraints, such as non-compete obligations or quantity-forcing, a regulation adopted pursuant to Article 6 VBER may concern only such additional restraints. Where appropriate, the Commission may also specify the market share level which, in the specific market context, may be regarded as insufficient to bring about a significant contribution by an individual undertaking to the cumulative effect.

(255) Article 1a of the Empowerment Regulation requires that a regulation adopted pursuant to Article 6 VBER foresees a transitional period of not less than six months before it becomes applicable. This period is meant to enable the undertakings concerned to adapt their vertical agreements accordingly.

(256) A regulation adopted pursuant to Article 6 VBER will not affect the exempted status of the agreements concerned for the period preceding the date of application of this regulation.

8. **ENFORCEMENT POLICY IN INDIVIDUAL CASES**

8.1. **The framework of analysis**

(257) Where the safe harbour provided by the VBER does not apply to a vertical agreement, it is relevant to examine whether, in the individual case, the vertical agreement falls within the scope of Article 101(1) and, if so, whether the conditions of Article 101(3) are satisfied. Provided that they do not contain restrictions of competition by object and in particular hardcore restrictions of competition, there is no presumption that vertical agreements falling outside the VBER due to the market share thresholds being exceeded fall within the scope of Article 101(1) or fail to satisfy the conditions of Article 101(3). Such agreements require an individual assessment. Agreements that either do not restrict competition within the meaning of Article 101(1) or which fulfil the conditions of Article 101(3) are valid and enforceable.
Pursuant to Article 1(2) Regulation 1/2003 undertakings do not need to notify a vertical agreement to benefit from an individual exemption under Article 101(3). In the case of an individual examination by the Commission, it is the Commission which bears the burden of proof that the vertical agreement in question infringes Article 101(1). The undertakings claiming the benefit of Article 101(3) bear the burden of proving that the conditions of that provision are fulfilled. When likely anti-competitive effects are demonstrated, undertakings may substantiate efficiency claims and explain why a certain distribution system is indispensable to bring likely benefits to consumers without eliminating competition before the Commission decides whether the agreement satisfies the conditions of Article 101(3).

The assessment of whether a vertical agreement has the effect of restricting competition will be made by comparing the situation on the relevant market with the vertical restraints in place with the situation that would prevail in the absence of the vertical restraints in the vertical agreement. In the assessment of individual cases, the Commission will take, as appropriate, both actual and likely effects into account. For vertical agreements to be restrictive of competition by effect, they must affect actual or potential competition to such an extent that on the relevant market negative effects on prices, output, innovation, or the variety or quality of the goods or services can be expected with a reasonable degree of probability. The likely negative effects on competition must be appreciable. Appreciable anticompetitive effects are more likely to occur when at least one of the parties to the agreement has or obtains some degree of market power and the agreement contributes to the creation, maintenance or strengthening of that market power, or allows the parties to the agreement to exploit such market power. Market power is the ability to maintain prices above competitive levels or to maintain output in terms of product quantities, product quality and variety or innovation below competitive levels for a not insignificant period of time. The degree of market power normally required for a finding of an infringement under Article 101(1) is less than the degree of market power required for a finding of dominance under Article 102.

8.1.1. Relevant factors for the assessment under Article 101(1)

In assessing individual vertical agreements between undertakings with market shares above the 30% threshold, the Commission will undertake a full competition analysis. The following factors are particularly relevant to establish whether a vertical agreement brings about an appreciable restriction of competition under Article 101(1):

(a) the nature of the agreement;
(b) the market position of the parties;
(c) the market position of competitors (upstream and downstream);
(d) the market position of buyers of the contract goods or services;
(e) the level of trade affected;
(f) the nature of the product; and
(g) the dynamics of the market.

See section 3.1. of these Guidelines.
Other factors may also be taken into account depending on their relevance for the assessment of the vertical agreement concerned.

The importance of individual factors may vary depending on the circumstances of the case. For instance, a high market share of the parties is usually a good indicator of market power, but in the case of low entry barriers market power may be sufficiently constrained by actual or potential entry. It is therefore not possible to provide firm rules of general applicability on the importance of individual factors.

Vertical agreements can take many shapes and forms. It is therefore important to analyse the nature of the agreement in terms of the restraints that it contains, the duration of those restraints and the percentage of total sales on the (downstream) market affected by those restraints. It may be necessary to go beyond the express terms of the agreement. The existence of implicit restraints may be derived from the way in which the agreement is implemented by the parties and the incentives that they face.

The market position of the parties provides an indication of the degree of market power, if any, possessed by the supplier, the buyer or both. The higher their market share, the greater their market power is likely to be. This is particularly so where the market share reflects cost advantages or other competitive advantages vis-à-vis competitors. Such competitive advantages may, for instance, result from being a first mover on the market (having the best site, etc.), from holding essential patents or having superior technology, from being the brand leader or having a superior portfolio. The degree of product differentiation can also be a relevant indicator for the presence of market power.

The market position of competitors is also important. The stronger the competitive position of competitors and the greater their number, the lower the risk that the parties will be able to individually exercise market power and foreclose the market or soften competition. It is also relevant to consider whether there are effective and timely counterstrategies that competitors would be likely to deploy. However, if the number of undertakings in the market is rather small and their market positions (in terms of e.g. size, costs and R&D potential) similar, vertical restraints may increase the risk of collusion. Fluctuating or rapidly changing market shares are in general an indication of intense competition.

The market position of the downstream customers of the parties to the agreement provides an indication of whether or not one or more of those customers possess buyer power. The first indicator of buyer power is the market share of the customer on the purchasing market. That share reflects the importance of its demand for possible suppliers. Other indicators focus on the position of the customer on the resale market where it is active, including characteristics such as a wide geographic spread of its outlets, own brands including private labels and its brand image among final customers. In some circumstances, buyer power may prevent consumer harm from an otherwise problematic vertical agreement. This is particularly so when strong customers have the capacity and incentive to bring new sources of supply on to the market in the case of a small but permanent increase in relative prices.

Entry barriers are measured by the extent to which incumbent firms can increase their price above the competitive level without attracting new entry. As a general rule, entry barriers can be said to be low when the exercise of market power by incumbents can be expected to be prevented or eroded by effective and likely entry within one or two years. Entry barriers may result from a broad range of factors such
as economies of scale and scope (including network effects of multi-sided businesses), government regulations (especially where they establish exclusive rights), state aid, import tariffs, intellectual property rights, ownership of resources where the supply is limited (due to e.g. natural limitations), essential facilities, a first mover advantage and brand loyalty of consumers created by strong advertising over a period of time. The question whether certain of those factors should be described as entry barriers depends particularly on whether they entail sunk costs. Sunk costs are costs that have to be incurred to enter or be active on a market but cannot be recovered upon exiting the market. Advertising costs to build consumer loyalty are normally sunk costs, unless an exiting firm could either sell its brand name or use it somewhere else without a loss. When entry requires high sunk costs, the threat of fierce competition by incumbents post-entry may deter such entry, as potential entrants cannot justify the risk of losing their sunk investments. Entry barriers may be present only at the supplier or buyer level or at both levels.

(268) As entry in general requires at least some sunk costs, actual competition is in general more effective and will weigh more heavily in the assessment of a case than potential competition.

(269) Vertical restraints and vertical integration may also work as an entry barrier by making access more difficult and foreclosing (potential) competitors. For instance, a non-compete obligation that ties distributors to a supplier may have a significant foreclosing effect if setting up its own distributors will impose sunk costs on the potential entrant.

(270) The level of trade is linked to the distinction between intermediate and final goods or services. Intermediate goods or services are sold to undertakings for use as an input to produce other goods or services and are generally not recognisable in the final goods or services. The buyers of intermediate goods or services are usually well-informed customers, able to assess quality and therefore less reliant on brand and image. Final goods or services are, directly or indirectly, sold to final customers that often rely more on brand and image.

(271) The nature of the product plays a role in particular for final goods or services in assessing both the likely negative and the likely positive effects. When assessing the likely negative effects, it is important whether the goods or services sold on the relevant market are homogeneous or rather differentiated, whether the product is expensive, taking up a large part of the consumer's budget, or rather is inexpensive and whether the product is a one-off purchase or repeatedly purchased.

(272) The dynamics of the market have to be carefully assessed on a case-by-case basis. While in some dynamic markets potential negative effects of certain vertical restraints may be unproblematic as inter-brand competition from dynamic and innovative rivals acts as a sufficient constraint, in other cases vertical restraints may afford an incumbent in a dynamic market a lasting competitive advantage and hence result in long term effects on competition. This may be the case when a vertical restraint deprives rivals from benefiting from network effects or when a market is prone to tipping.

(273) When assessing a particular vertical restraint under Article 101, also other factors may have to be taken into account. These can include cumulative effects deriving from the coverage of the market by similar agreements of other suppliers, whether the agreement is "imposed" in the sense that mainly one party to the agreement is subject to the restrictions or obligations or “agreed” in the sense that both parties to
the agreement accept the restrictions or obligations, the regulatory environment and behaviour that may indicate or facilitate collusion like price leadership, pre-announced price changes and price discussions, price rigidity in response to excess capacity, price discrimination and past collusive behaviour.

8.1.2. Relevant factors for the assessment under Article 101(3)

Restrictive vertical agreements may also produce pro-competitive effects in the form of efficiencies, which may outweigh their anti-competitive effects. Such an assessment takes place within the framework of Article 101(3), which contains an individual exception from the prohibition enshrined in Article 101(1). For that exception to be applicable, the vertical agreement must fulfil the following four conditions: (i) it must produce objective economic benefits, (ii) the restrictions on competition must be indispensable to attain these efficiencies, (iii) consumers must receive a fair share of the efficiency gains, and (iv) the agreement must not afford the parties the possibility of eliminating competition in respect of a substantial part of the goods or services concerned. ¹⁰⁸

Under Article 101(3), the assessment of vertical agreements is made within the actual context in which they occur, ¹⁰⁹ and on the basis of the facts existing at any given point in time. The assessment is sensitive to material changes in the facts. The individual exception enshrined in Article 101(3) applies as long as the four conditions are fulfilled and ceases to apply when that is no longer the case. ¹¹⁰ When applying Article 101(3) in accordance with these principles it is necessary to take into account the investments made by the parties to the agreement, as well as the time needed and the restraints required to commit and recoup an efficiency enhancing investment.

The first condition of Article 101(3) requires an assessment of the objective benefits in terms of efficiencies produced by the vertical agreement. In this respect, vertical agreements often have the potential to help realise efficiencies, as explained in section 2.1. of these Guidelines, by improving the way in which the parties to the agreement conduct their complementary activities.

When assessing the indispensability test contained in the second condition of Article 101(3), the Commission will in particular examine whether individual restrictions make it possible to perform the production, purchase and/or (re)sale of the contract products more efficiently than would have been the case in the absence of the restriction concerned. In making such an assessment, the market conditions and the realities faced by the parties to the agreement must be taken into account. Undertakings invoking the benefit of Article 101(3) are not required to consider hypothetical and theoretical alternatives. They must, however, explain and demonstrate why seemingly realistic and significantly less restrictive alternatives would not produce the same efficiencies. If the application of what appears to be a commercially realistic and less restrictive alternative would lead to a significant loss of efficiencies, the restriction in question is treated as indispensable.

¹¹⁰ See in this respect for example Commission Decision 1999/242/EC (Case No IV/36.237 – TPS), OJ L 90, 2.4.1999, p. 6. Similarly, the prohibition enshrined in Article 101(1) only applies as long as the agreement has a restrictive object or restrictive effects.
The third condition of Article 101(3) requires that consumers must receive a fair share of the benefits. This implies that consumers of the goods or services purchased and/or (re)sold under the vertical agreement must at least be compensated for the negative effects of the agreement. In other words, the efficiency gains must fully off-set the likely negative impact on prices, output and other relevant factors caused by the vertical agreement.

The fourth condition of Article 101(3) requires that the vertical agreement must not afford the parties to the agreement the possibility of eliminating competition in respect of a substantial part of the goods or services concerned. This presupposes an analysis of the remaining competitive pressure on the market and the impact of the agreement on such remaining sources of competition. When assessing this condition, the relationship between Article 101(3) and Article 102 must be taken into account. According to settled case law, the application of Article 101(3) cannot prevent the application of Article 102. Moreover, since Articles 101 and 102 both pursue the aim of maintaining effective competition on the market, consistency requires that Article 101(3) be interpreted as precluding any application of this exception to restrictive vertical agreements that constitute an abuse of a dominant position. This condition requires that vertical agreement must not eliminate effective competition by removing all or most existing sources of actual or potential competition. Rivalry between undertakings is an essential driver of economic efficiency, including dynamic efficiencies in the form of innovation. In its absence, the dominant undertaking will lack adequate incentives to continue to create and pass on efficiency gains. A restrictive agreement which maintains, creates or strengthens a market position approaching that of a monopoly can normally not be justified on the grounds that it also creates efficiency gains.

8.2. Analysis of specific vertical restraints

While the previous parts of these Guidelines, notably the sixth part, include guidance on the assessment of vertical restraints that amount to hardcore restrictions pursuant to Article 4 VBER, excluded restrictions pursuant to Article 5 VBER, and related restrictions, the following paragraphs provide guidance on other specific vertical restraints. As regards vertical restraints that are not specifically addressed in these Guidelines, the Commission will treat these vertical restraints according to the same principles taking into account the relevant factors, as set out in this eight part of these Guidelines.

8.2.1. Single branding

Under the heading of “single branding” fall those agreements which have as their main element the fact that the buyer is obliged or induced to concentrate its orders for a particular type of product with one supplier. That requirement can be found...
amongst others in non-compete and quantity-forcing clauses imposed on the buyer. A non-compete arrangement is based on an obligation or incentive scheme which results in the buyer purchasing more than 80% of its requirements on a particular market from only one supplier. It does not mean that the buyer can only buy directly from the supplier, but that the buyer will de facto not buy and resell or incorporate competing goods or services. Quantity-forcing on the buyer is a weaker form of non-compete, where incentives or obligations agreed between the supplier and the buyer result in the latter concentrating its purchases to a large extent with one supplier. Quantity-forcing may for example take the form of minimum purchase requirements, stocking requirements or non-linear pricing, such as conditional rebate schemes or a two-part tariff (fixed fee plus a price per unit). A so-called English clause, requiring the buyer to report any better offer and allowing him only to accept such an offer when the supplier does not match it, can be expected to have the same effect as a single branding obligation, especially when the buyer has to reveal who makes the better offer.

(282) The possible competition risks of single branding are foreclosure of the market to competing suppliers and potential suppliers, softening of competition and facilitation of collusion between suppliers in case of cumulative use and, where the buyer is a retailer selling to end-consumers, a loss of in-store inter-brand competition. Such restrictive effects have a direct impact on inter-brand competition.

(283) Single branding is exempted by the VBER where the supplier's and buyer's market share each do not exceed 30% and are subject to a limitation in time of five years for the non-compete obligation. Above the market share threshold or beyond the time limit of five years, single branding agreements are no longer covered by the block exemption and therefore must be individually assessed. The remainder of this section provides guidance for the assessment of individual cases above the market share threshold or beyond the time limit of five years.

(284) The capacity for single branding obligations of a specific supplier to result in anticompetitive foreclosure arises in particular where, without the obligations, an important competitive constraint would be exercised by competitors that either are not yet present on the market at the time the obligations are concluded, or that are not in a position to compete for the full supply of the customers. Competitors may not be able to compete for an individual customer's entire demand because the supplier in question is an unavoidable trading partner at least for part of the demand on the market, for instance because its brand is a "must stock item" preferred by many final consumers or because the capacity constraints on the other suppliers are such that a part of demand can only be provided for by the supplier in question.\footnote{Judgment in Case T-65/98 \textit{Van den Bergh Foods v Commission} EU:T:2003:281, paragraphs 104 and 156.} The market position of the supplier is thus of main importance to assess possible anti-competitive effects of single branding obligations.

(285) If competitors can compete on equal terms for each individual customer's entire demand, single branding obligations of a specific supplier are generally unlikely to hamper effective competition unless the switching of supplier by customers is rendered difficult due to the duration and market coverage of the single branding obligations. The higher the part of its market share sold under a single branding obligation and/or the longer the duration of the single branding obligations, the more
significant foreclosure is likely to be. Single branding obligations shorter than one year entered into by non-dominant companies are in general not considered to give rise to appreciable anti-competitive effects or net negative effects. Single branding obligations between one and five years entered into by non-dominant companies usually require a proper balancing of pro- and anti-competitive effects, while single branding obligations exceeding five years are for most types of investments not considered necessary to achieve the claimed efficiencies or the efficiencies are not sufficient to outweigh their foreclosure effect. Single branding obligations are more likely to result in anti-competitive foreclosure when entered into by dominant companies.

(286) When assessing the supplier's market power, the market position of its competitors is important. As long as the competitors are sufficiently numerous and strong, no appreciable anti-competitive effects can be expected. Foreclosure of competitors is not very likely where they hold similar market positions and can offer similarly attractive products. In such a case, foreclosure may, however, occur for potential entrants when a number of major suppliers enter into single branding contracts with a significant number of buyers on the relevant market (cumulative effect situation). This is also a situation where single branding agreements may facilitate collusion between competing suppliers. If those suppliers are individually covered by the VBER, a withdrawal of the block exemption may be necessary to deal with such a negative cumulative effect. A tied market share of less than 5% is not considered in general to contribute significantly to a cumulative foreclosure effect.

(287) In cases where the market share of the largest supplier is below 30% and the market share of the five largest suppliers is below 50%, there is unlikely to be a single or a cumulative anti-competitive effect situation. Where a potential entrant cannot penetrate the market profitably, it is likely to be due to factors other than single branding obligations, such as consumer preferences.

(288) Entry barriers are important to establish whether there is anticompetitive foreclosure. Wherever it is relatively easy for competing suppliers to create their own integrated distribution network or finding alternative distributors for their product, foreclosure is unlikely to be a real problem. However, there are often entry barriers, both at the manufacturing and at the distribution level.

(289) Countervailing power is relevant, as powerful buyers will not easily allow themselves to be cut off from the supply of competing goods or services. More generally, in order to convince customers to accept single branding, the supplier may have to compensate them, in whole or in part, for the loss in competition resulting from the exclusivity. Where such compensation is given, it may be in the individual interest of a customer to enter into a single branding obligation with the supplier. But it would be wrong to conclude from this that all single branding obligations, taken together, are overall beneficial for customers on that market and for the final consumers. It is in particular unlikely that consumers as a whole will benefit if there are many customers and the single branding obligations, taken together, have the effect of preventing the entry or expansion of competing undertakings.

(290) Lastly, "the level of trade" is relevant. Foreclosure is less likely in case of an intermediate product. When the supplier of an intermediate product is not dominant, the competing suppliers still have a substantial part of demand that is free. Below the level of dominance an anticompetitive foreclosure effect may however arise in a
cumulative effect situation. A cumulative anticompetitive effect is unlikely to arise as long as less than 50% of the market is tied.

(291) Where the agreement concerns the supply of a final product at the wholesale level, the question whether a competition problem is likely to arise depends in large part on the type of wholesaling and the entry barriers at the wholesale level. There is no real risk of foreclosure if competing manufacturers can easily establish their own wholesaling system. Whether entry barriers are low depends in part on the type of wholesaling system the supplier can efficiently establish. In a market where wholesaling can operate efficiently with only the product concerned by the agreement (for example ice cream), the manufacturer has an interest in setting up its own wholesaling system and is unlikely to be foreclosed from that market. On the contrary, in a market where it is more efficient to wholesale a whole range of products (for example frozen foodstuffs), it is not efficient for a manufacturer selling only one product to set up its own wholesaling operation. Without access to established wholesalers, the manufacturer is likely to be excluded from that market. In that case, anti-competitive effects may arise. In addition, cumulative effect problems may arise if several suppliers tie most of the available wholesalers.

(292) For final products, foreclosure is in general more likely to occur at the retail level, given the significant entry barriers for most manufacturers to start retail outlets just for their own products. In addition, it is at the retail level that single branding agreements may lead to reduced in-store inter-brand competition. It is for these reasons that for final products at the retail level, significant anti-competitive effects may arise, taking into account all other relevant factors, if a non-dominant supplier ties 30% or more of the relevant market. For a dominant company, even a modest tied market share may already lead to significant anti-competitive effects.

(293) At the retail level, a cumulative foreclosure effect may also arise. Where all suppliers have market shares below 30%, a cumulative anticompetitive foreclosure effect is unlikely if the total tied market share is less than 40% and withdrawal of the block exemption is therefore unlikely. That figure may be higher when other factors like the number of competitors, entry barriers etc. are taken into account. Where not all companies have market shares below the threshold of the VBER but none is dominant, a cumulative anticompetitive foreclosure effect is unlikely if the total tied market share is below 30%.

(294) Where the buyer operates from premises and land owned by the supplier or leased by the supplier from a third party not connected with the buyer, the possibility of imposing effective remedies for a possible foreclosure effect will be limited. In that case, intervention by the Commission below the level of dominance is unlikely.

(295) In certain sectors, the selling of more than one brand from a single site may be difficult, in which case a foreclosure problem can better be remedied by limiting the effective duration of contracts.

(296) Where appreciable anti-competitive effects are established, the question of a possible exemption under Article 101(3) arises. For non-compete obligations, the efficiencies described in points (b) (free riding between suppliers), (e), (f) (hold-up problems) and (i) (capital market imperfections) of paragraph (14) of these Guidelines, may be particularly relevant.

(297) In the case of an efficiency as described in paragraphs (14)(b), (14)(e) and (14)(i) of these Guidelines, quantity forcing on the buyer could possibly be a less restrictive
alternative. A non-compete obligation may be the only viable way to achieve an efficiency as described in paragraph (14)(f) of these Guidelines, (hold-up problem related to the transfer of know-how).

(298) In the case of a relationship-specific investment made by the supplier (see paragraph (14)(e) of these Guidelines), a non-compete or quantity forcing agreement for the period of depreciation of the investment will in general fulfill the conditions of Article 101(3). In the case of high relationship-specific investments, a non-compete obligation exceeding five years may be justified. A relationship-specific investment could, for instance, be the installation or adaptation of equipment by the supplier when this equipment can be used afterwards only to produce components for a particular buyer. General or market-specific investments in (extra) capacity are normally not relationship-specific investments. However, where a supplier creates new capacity specifically linked to the operations of a particular buyer, for instance a company producing metal cans which creates new capacity to produce cans on the premises of or next to the canning facility of a food producer, this new capacity may only be economically viable when producing for this particular customer, in which case the investment would be considered to be relationship-specific.

(299) Where the supplier provides the buyer with a loan or provides the buyer with equipment which is not relationship-specific, this in itself is normally not sufficient to justify the exemption of an anticompetitive foreclosure effect on the market. In case of capital market imperfection, it may be more efficient for the supplier of a product than for a bank to provide a loan (see paragraph (14)(i) of these Guidelines). However, in such a case the loan should be provided in the least restrictive way and the buyer should thus in general not be prevented from terminating the obligation and repaying the outstanding part of the loan at any point in time and without payment of any penalty.

(300) The transfer of substantial know-how (paragraph (14)(f) of these Guidelines) usually justifies a non-compete obligation for the whole duration of the supply agreement, as for example in the context of franchising.

(301) Example of non-compete obligation

| The market leader in a national market for an impulse consumer product, with a market share of 40%, sells most of its products (90%) through tied retailers (tied market share 36%). The agreements oblige the retailers to purchase only from the market leader for at least four years. The market leader is especially strongly represented in the more densely populated areas like the capital. Its competitors, 10 in number, of which some are only locally available, all have much smaller market shares, the biggest having 12%. Those 10 competitors together supply another 10% of the market via tied outlets. There is strong brand and product differentiation in the market. The market leader has the strongest brands. It is the only one with regular national advertising campaigns. It provides its tied retailers with special stocking cabinets for its product.

The result on the market is that in total 46% (36% + 10%) of the market is foreclosed to potential entrants and to incumbents not having tied outlets. Potential entrants find entry even more difficult in the densely populated areas where foreclosure is even higher, although it is there that they would prefer to enter the market. In addition, owing to the strong brand and product differentiation and the high search costs relative to the price of the product, the absence of in-store inter-brand competition leads to an extra welfare loss for consumers. The possible efficiencies of the outlet |
exclusivity, which the market leader claims result from reduced transport costs and a possible hold-up problem concerning the stocking cabinets, are limited and do not outweigh the negative effects on competition. The efficiencies are limited, as the transport costs are linked to quantity and not exclusivity and the stocking cabinets do not contain special know-how and are not brand specific. Accordingly, it is unlikely that the conditions of Article 101(3) are fulfilled.

(302) Example of quantity forcing

A producer X with a 40% market share sells 80% of its products through contracts which specify that the reseller is required to purchase at least 75% of its requirements for that type of product from X. In return X is offering financing and equipment at favourable rates. The contracts have a duration of five years in which repayment of the loan is foreseen in equal instalments. However, after the first two years buyers have the possibility to terminate the contract with a six-month notice period if they repay the outstanding loan and take over the equipment at its market asset value. At the end of the five-year period the equipment becomes the property of the buyer. Most of the competing producers are small, twelve in total with the biggest having a market share of 20%, and engage in similar contracts with different durations. The producers with market shares below 10% often have contracts with longer durations and with less generous termination clauses. The contracts of producer X leave 25% of requirements free to be supplied by competitors. In the last three years, two new producers have entered the market and gained a combined market share of around 8%, partly by taking over the loans of a number of resellers in return for contracts with these resellers.

Producer X's tied market share is 24% (0.75 × 0.80 × 40%). The other producers' tied market share is around 25%. Therefore, in total around 49% of the market is foreclosed to potential entrants and to incumbents not having tied outlets for at least the first two years of the supply contracts. The market shows that the resellers often have difficulty in obtaining loans from banks and are too small in general to obtain capital through other means like the issuing of shares. In addition, producer X is able to demonstrate that concentrating its sales on a limited number of resellers allows him to plan its sales better and to save transport costs. In the light of the efficiencies on the one hand and the 25% non-tied part in the contracts of producer X, the real possibility for early termination of the contract, the recent entry of new producers and the fact that around half the resellers are not tied on the other hand, the quantity forcing of 75% applied by producer X is likely to fulfil the conditions of Article 101(3).

8.2.2. Exclusive supply

(303) Exclusive supply refer to dispositions that oblige or induce the supplier to sell the contract products only or mainly to one buyer, in general or for a particular use. Such restrictions may take the form of an exclusive supply obligation, obliging the supplier to sell to only one buyer for the purposes of resale or a particular use, but may also for instance take the form of quantity forcing on the supplier, where incentives are agreed between a supplier and a buyer which make the former concentrate its sales mainly with this buyer. For intermediate goods or services, exclusive supply is often referred to as industrial supply.

(304) Exclusive supply is exempted by the VBER where both the supplier's and buyer's market share does not exceed 30%, even if combined with other non-hardcore vertical restraints such as non-compete. The remainder of this section provides
guidance for the assessment of exclusive supply in individual cases above the market share threshold.

(305) The main competition risk of exclusive supply is anticompetitive foreclosure of other buyers. There is a similarity with the possible effects of exclusive distribution, in particular when the exclusive distributor becomes the exclusive buyer for a whole market (see in particular paragraph (113) of these Guidelines). The market share of the buyer on the upstream purchase market is obviously important for assessing the ability of the buyer to impose exclusive supply which forecloses other buyers from access to supplies. The importance of the buyer on the downstream market is however the most significant factor to determine whether a competition problem may arise. If the buyer has no market power downstream, then no appreciable negative effects for consumers can be expected. Negative effects may arise when the market share of the buyer on the downstream supply market as well as the upstream purchase market exceeds 30%. Where the market share of the buyer on the upstream market does not exceed 30%, significant foreclosure effects may still arise, especially when the market share of the buyer on its downstream market exceeds 30% and the exclusive supply relates to a particular use of the contract products. Where a company is dominant on the downstream market, any obligation to supply the products only or mainly to the dominant buyer are likely to have significant anti-competitive effects.

(306) It is not only the market position of the buyer on the upstream and downstream market that is important but also the extent and the duration of the exclusive supply obligation. The higher the tied supply share, and the longer the duration of the exclusive supply obligation, the more significant the foreclosure effect is likely to be. Exclusive supply agreements shorter than five years entered into by non-dominant companies usually require a balancing of pro- and anti-competitive effects, while agreements lasting longer than five years are for most types of investments not considered necessary to achieve the claimed efficiencies or the efficiencies are not sufficient to outweigh the foreclosure effect of such long-term exclusive supply agreements.

(307) The market position of the competing buyers on the upstream market is also important as it is likely that exclusive supply agreement will foreclose competing buyers for anti-competitive reasons, such as increasing their costs, especially if they are significantly smaller than the foreclosing buyer. Foreclosure of competing buyers is not very likely where those competitors have similar buying power than the buyer party to the agreement and can offer the suppliers similar sales possibilities. In such a case, foreclosure could only occur for potential entrants, which may not be able to secure supplies when a number of major buyers all enter into exclusive supply contracts with the majority of suppliers on the market. Such a cumulative effect may lead to withdrawal of the benefit of the VBER.

(308) The existence of entry barriers at the supplier level as well as their size are relevant to assessing whether there is real foreclosure. In as far as it is efficient for competing buyers to provide the goods or services themselves via upstream vertical integration, foreclosure is unlikely to be a real problem. However, there are often significant entry barriers.

(309) Countervailing power of suppliers should also be taken into account as important suppliers will not easily let one buyer cut them off from alternative buyers. Foreclosure is therefore mainly a risk in the case of weak suppliers and strong
buyers. In the case of strong suppliers, the exclusive supply may be found in combination with non-compete obligations. Such a combination brings in the rules developed for single branding. Where there are relationship-specific investments involved on both sides (hold-up problem) the combination of exclusive supply and non-compete obligations that is, reciprocal exclusivity in industrial supply agreements may often be justified, in particular below the level of dominance.

(310) Lastly, the level of trade and the nature of the product are relevant to assess possible foreclosure effect. Anticompetitive foreclosure is less likely in the case of an intermediate product or where the product is homogeneous. Firstly, a foreclosed manufacturer that uses a certain input usually has more flexibility to respond to the demand of its customers than the wholesaler or retailer has in responding to the demand of the final consumer for whom brands may play an important role. Secondly, the loss of a possible source of supply matters less for the foreclosed buyers in the case of homogeneous products than in the case of a heterogeneous product with different grades and qualities. For final branded products or differentiated intermediate products where there are entry barriers, exclusive supply may have appreciable anti-competitive effects where the competing buyers are relatively small compared to the foreclosing buyer, even if the latter is not dominant on the downstream market.

(311) Efficiencies can be expected in the case of a hold-up problem (paragraphs (14)(e) and (14)(f) of these Guidelines), and such efficiencies are more likely for intermediate products than for final products. Other efficiencies are less likely. Possible economies of scale in distribution (paragraph (14)(g) of these Guidelines) do not seem likely to justify exclusive supply.

(312) In the case of a hold-up problem and even more so in the case of economies of scale in distribution, quantity forcing on the supplier, such as minimum supply requirements, could well be a less restrictive alternative.

Example of exclusive supply

On a market for a certain type of components (intermediate product market) supplier A agrees with buyer B to develop a different version of the component, with its own know-how and considerable investment in new machines and with the help of specifications supplied by buyer B. B will have to make considerable investments to incorporate the new component. It is agreed that A will supply the new product only to buyer B for a period of five years from the date of first entry on the market. B is obliged to buy the new product only from A for the same period of five years. Both A and B can continue to sell and buy respectively other versions of the component elsewhere. The market share of buyer B on the upstream component market and on the downstream final goods market is 40%. The market share of the component supplier is 35%. There are two other component suppliers with around 20-25% market share and a number of small suppliers.

Given the considerable investments, the agreement is likely to fulfil the conditions of Article 101(3) in view of the efficiencies and the limited foreclosure effect. Other buyers are foreclosed from a particular version of a product of a supplier with 35% market share, but other component suppliers could develop similar new products. The foreclosure of part of buyer B’s demand to other suppliers is limited to maximum 40% of the market.
8.2.3. Restrictions on the use of online marketplaces

(313) Online marketplaces are online platforms which connect merchants and potential customers with a view to enabling direct purchases. Online platforms that offer no direct purchasing functionality, but re-direct customers to other websites where goods and services can be purchased, are not considered online marketplaces for the purpose of these Guidelines, but advertising platforms.

(314) Online marketplaces have become an important sales channel for suppliers and retailers, providing them with access to a large number of customers, as well as for end users. Online marketplaces may allow retailers to start selling online with lower initial investments. They may also facilitate cross-border sales and increase the visibility of, notably small and medium-sized, retailers that do not operate their own online shop or are not well known to end users.

(315) Suppliers may wish to restrict the use of online marketplaces by their buyers, for instance to protect the image and positioning of their brand, to discourage the sale of counterfeit products, to ensure sufficient pre- and post-sale services or to ensure that the retailer maintains direct a relationship with customers. The restrictions may range from a total ban on the use of online marketplaces to the imposition of certain qualitative requirements which the marketplaces must meet. For instance, suppliers may prohibit the use of marketplaces on which products are sold by auction, or they may require buyers to use specialised marketplaces, in order to ensure certain quality standards regarding the environment and parameters of the sale of their goods or services. Some qualitative requirements may de facto ban the use of online marketplaces, because no online marketplace is capable of meeting the requirement, for example, where the supplier requires that the logo of the online marketplace is not visible or requires that the domain name of any website used by the retailer contains the name of the retailer's business.

(316) A restriction of sales on online marketplaces in a vertical agreement is exempted by the VBER where the market shares of each of the supplier and the buyer do not exceed 30% and the vertical agreement does not include any hardcore restriction under the VBER or any excluded restriction under the VBER that cannot be severed from the rest of the vertical agreement. As set out in Article 1 VBER and section 6.1.2. of these Guidelines, a restriction or ban of sales on online marketplaces concerns the modalities of the buyer’s online sales and does not limit sales into a specific territory or to a specific customer group. While it restricts the use of a specific online channel, other online channels remain available to the buyer. For example, despite a restriction or a ban of sales on online market places, the buyer may still sell the contract goods or services via its own website and use online advertising channels to attract customers to its website.

(317) While any restriction of online sales that directly or indirectly has as its object to prevent the buyer or its customers from effectively using the internet for the purposes of selling their goods or services online is a hardcore restriction within the meaning of Article 4(b) to (d) VBER and a restriction of Article 101(1) by object, a restriction

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116 Judgement in Case C-230/16 Coty Germany GmbH v Parfümerie Akzente GmbH ECLI:EU:C:2017:941, paragraphs 64-69.
117 Judgment in Case C-230/16 Coty Germany GmbH v Parfümerie Akzente GmbH ECLI:EU:C:2017:941, paragraphs 52-54.
on the use of online marketplaces can generally benefit from the safe harbour of the VBER. As set out in paragraph (194), a restriction in the use of online marketplaces generally does not affect a group of online users which can be circumscribed within the group of online purchasers, and does not limit the buyer from selling the contract goods or services via its own website or from advertising under certain circumstances via the internet on third-party platforms and from using online search engines to attract customers to its website, and, therefore, does not constitute a hardcore restriction under Article 4(b) to (d) VBER, to the extent that it does not de facto prevent the effective use of the internet by the buyers or their customers to sell online.

(318) The remainder of this section provides guidance for the assessment of restrictions on the use of online marketplaces in individual cases where the 30% market share thresholds are exceeded. The general principles set out in Section 8.1 provide the relevant framework for this assessment. Restrictions on the use of online marketplaces for sales into territories or to customer groups that are reserved exclusively to the supplier or allocated exclusively to other distributors form part of an exclusive distribution system and should be assessed together with that system.

(319) Restrictions on the use of online marketplaces are often imposed in selective distribution systems. Section 4.6.2 sets out the criteria under which a selective distribution system falls outside the scope of Article 101(1), namely when (i) resellers are chosen on the basis of objective criteria of a qualitative nature that are laid down uniformly for all potential resellers and not applied in a discriminatory fashion, (ii) the characteristics of the contract goods or services necessitate a selective distribution network in order to preserve their quality and ensure their proper use and (iii) the criteria laid down do not go beyond what is necessary.\(^\text{118}\) Especially in instances where the supplier does not enter into an agreement with the online marketplace and is thus unable to ensure that the marketplace meets its selection criteria, a restriction or ban on the use of online marketplaces may fulfil the above criteria and thus be appropriate and not go beyond what is necessary to preserve the quality and ensure the proper use of the contract goods or services. However, in cases where a supplier includes the operator of an online marketplace as an authorised distributor in its selective distribution system, or, where it restricts the use of online marketplaces by some authorised distributors but not others, or where it restricts the use of an online marketplace, but uses that marketplace itself to distribute the contract goods or services, restrictions on the use of such online marketplaces would appear unlikely to fulfil the requirements of appropriateness and necessity.

(320) The possible risks to competition arising from restrictions on the use of online marketplaces are a reduction of intra-brand competition at the distribution level and the foreclosure of distributors, notably small and medium ones, to the extent that distributors are deprived of a potentially important sales channel.

(321) To assess the possible anti-competitive effects of restrictions on the use of online marketplaces, it is first necessary to assess the degree of inter-brand competition. As set out in section 8.1.1. of these Guidelines, sufficient inter-brand competition can in principle mitigate any loss of intra-brand competition. For this purpose, the market

\(^{118}\) Judgment in Case C-230/16 Coty Germany GmbH v Parfümerie Akzente GmbH ECLI:EU:C:2017:941, paragraphs 24 to 36.
position of the supplier and of its competitors should be taken into account. Second, it is necessary to take into account the type and scope of the restrictions on the use of online marketplaces. For instance, a ban on all sales through online marketplaces is more restrictive than a restriction on the use of particular online marketplaces or a requirement to only use marketplaces that meet certain qualitative criteria. Third, the relative importance of the restricted online marketplaces as a sales channel in the relevant product and geographic markets should be taken into account. Lastly, it is necessary to take into account the cumulative effect of any other restrictions on online sales or advertising imposed by the supplier.

(322) As set out in paragraph (314) of these Guidelines, restrictions on the use of online marketplaces may lead to efficiencies, in particular linked to ensuring brand protection or a certain level of service quality or reducing opportunities for counterfeiting. To the extent that the restrictions do not already fall outside the scope of Article 101(1), the assessment must consider whether such efficiencies may be achieved through less restrictive means, in line with the conditions of Article 101(3). This could be the case where the online marketplace allows retailers to create their own brand shop within the marketplace. Any quality-related justifications brought forward by the supplier will be unlikely to meet the conditions of Article 101(3) where the supplier itself uses the online marketplaces that are covered by the restrictions, or where the supplier imposes the restriction only on some distributors but not on others, or where the operator of the online marketplace is itself an authorised member of the selective distribution system.

8.2.4. Restrictions on the use of price comparison tools

(323) Price comparison tools, for instance price comparison websites or apps, enable retailers to increase their visibility and generate traffic for their website and they enable potential customers to find retailers, compare different products and compare offers for the same product. Price comparison tools increase price transparency and intensify intra-brand and potentially inter-brand price competition between retailers.

(324) Unlike online marketplaces, price comparison tools typically do not offer sale and purchase functionality, but rather re-direct customers to the website of the retailer, enabling a direct transaction between the customer and the retailer.119 Price comparison tools are therefore not a distinct online sales channel, but rather an online advertising channel.

(325) Suppliers may wish to restrict the use of price comparisons tools,120 for instance to protect their brand image, as price comparison tools typically focus on price and may not allow retailers to differentiate themselves through other features, such as the range or quality of the contract goods or services. Other reasons for restricting the use of price comparison tools may be to reduce opportunities for counterfeiting, or to protect business models that rely on, for instance, specialisation or quality rather than price.

119 For the purpose of these Guidelines, price comparison tools refer to online platforms that do not enable users to conclude purchase transactions on the platform. Platforms that allow users to conclude purchase transactions on the platform are considered to be online marketplaces for the purposes of these Guidelines. Restrictions on the use of online marketplaces are dealt with in section 8.2.3. of these Guidelines.

Restrictions on the use of price comparison tools may range from a direct or indirect ban to restrictions based on quality requirements or requirements to include specific content in the offers advertised on the price comparison tool. For example, a restriction on providing price information to price comparison tools, or a requirement to obtain the supplier’s authorisation before using price comparison tools, or a restriction on the use of the supplier’s brand on price comparison tools may amount to an indirect prevention in the use of price comparison tools.

Restrictions on the use of price comparison tools may increase consumer search costs and thereby soften retail price competition. As with other online advertising restrictions, restrictions on the ability of the buyer to use price comparison tools may restrict the buyer from selling to customers that are located outside its physical trading area and who wish to purchase online. Preventing the use of price comparison tools in a vertical agreement restricts the buyer’s ability to target potential customers, inform them about its offering and direct them to its website. As long as the use of price comparison tools is not, as such, a targeted form of advertising, as set out in paragraph (200) of these Guidelines, preventing the use of price comparison tools as an online advertising channel is capable of restricting passive sales to customers wishing to purchase online and located outside the physical trading area of the distributor and constitutes a hardcore restriction under Article 4(b) to (d) VBER. The main possible competition risks in such case are market partitioning, which may facilitate price discrimination, and reduced intra-brand competition. Conversely, if the restriction is limited to the use of price comparison tools to target customers in a territory or customer group that is reserved exclusively to the supplier or allocated exclusively to other distributors (exclusive distribution), for instance because the price comparison tool is in a language not commonly used in the territory in which the buyer is established or has a domain name not used in the territory in which the buyer is established, the restriction would be covered by the exception of Article 4(b)(i) VBER.

Restrictions on the use of price comparison tools which fall short of directly or indirectly preventing their use, for instance requirements that price comparison tools must meet certain quality standards, do not restrict sales to customers in a specific territory or customer group, but rather determine the methods of sale and therefore benefit from the block exemption provided by the VBER. The following guidance is provided for the assessment of such restrictions where the VBER does not apply.

Restrictions on the use of price comparison tools are often imposed in selective distribution systems. Section 4.6.2. of these Guidelines sets out the criteria under which a selective distribution system falls outside the scope of Article 101(1). However, it is unlikely that preventing the use of price comparison tools will be appropriate or necessary to preserve the quality or ensure the proper use of contract goods or services, because these tools typically re-direct potential customers to the website of the authorised distributor to make the purchase. The supplier is able to exert control over the distributor’s website through its selection criteria and by imposing requirements in its vertical agreement with the distributor.

Restrictions on the use of price comparison tools which fall short of directly or indirectly preventing their use, for instance, a requirement to only use price comparison tools meeting certain quality standards, may, when not covered by the VBER, significantly limit the ability of the buyer to use price comparison tools. In those instances, it may have to be assessed if the restriction leads to effects similar to those of preventing the use of price comparison tools, namely to consumer harm
consisting in an increase of consumers’ search costs and the softening of price competition or to market partitioning, which may facilitate price discrimination, ultimately impacting inter-brand, and possibly also intra-brand competition. Such restrictions may also limit intra-brand competition, for example, where a supplier does not impose the restrictions on all its distributors or where the supplier itself uses the price comparison tools covered by the restriction. To the extent that distributors are prevented from relying on a potentially significant online advertising channel, they would only exercise limited competitive pressure on the supplier or any other distributors not facing this restriction.

(331) Relevant factors for the assessment under Article 101(1) include the market position of the supplier and its competitors; the importance of price comparison tools as an advertising channel in the product and geographic markets of the contract goods or services; the type and scope of the restrictions and the relative importance of any specific price comparison tools whose use is restricted or banned, as well as whether the supplier also imposes restrictions on the distributor’s ability to use other forms of online advertising. The cumulative effect of any such other restrictions with the restriction on the use of price comparison tools should be taken into account.

(332) As set out in paragraph (323) of these Guidelines, restrictions on the use of price comparison tools may lead to efficiencies, in particular linked to ensuring brand protection or a certain level of service quality or reducing opportunities for counterfeiting. In line with the conditions of Article 101(3), the assessment must consider whether such efficiencies may also be achieved through less restrictive means. This could be the case where the price comparison tool also provides for comparisons or reviews linked to the quality of the goods or services concerned, the customer service, the trustworthiness of the distributor or other features of the distributors’ offerings. Any assessment of quality-related justifications under Article 101(3) should take into account that the sale does not occur on the price comparison tool itself, but on the website of the distributor, which, on the basis of the distribution agreement entered into with the supplier, should meet the supplier’s quality requirements.

8.2.5. Parity obligations

(333) Parity obligations, also called Most Favoured Nation clauses (MFNs) or Across Platform Parity Agreements (APPAs), require a supplier of goods or services to offer them to another party on conditions that are no less favourable than the conditions offered by the supplier to certain other parties or on certain other channels. The conditions may concern prices, inventory, availability or any other terms or conditions of offer or sale. The obligation may be express or it may be applied by other direct or indirect means, such as differential pricing or other incentives or measures whose application depends on the conditions under which the supplier offers its goods or services to particular parties or on particular channels.

(334) Parity obligations imposed by suppliers of online intermediation services (for example, marketplaces or price comparison tools) relating to the conditions under which goods or services are offered to end users (final consumers or other undertakings) are generally referred to as retail parity obligations. For this type of obligation to be effective, the supplier of goods or services that accepts the obligation must generally be able to control the price and other conditions under which its goods or services are offered on the retail channels to which the obligation refers. Similar parity obligations may be used by upstream suppliers of online
intermediation services relating to the conditions under which goods or services are offered to undertakings that are not end users (for example, to retailers). As regards parity obligations used by buyers, these include obligations imposed by manufacturers, wholesalers or retailers relating to the conditions under which they purchase inputs from suppliers.

A further distinction concerns the channels covered by the parity obligation. The obligation may refer to sales channels operated by a supplier of goods or services (direct channels); to channels operated by third parties (indirect channels), or to all channels. Parity obligations which refer only to direct channels are often called ‘narrow’, whereas those that refer to all channels are often called ‘wide’.

With the exception of the across-platform retail parity obligations defined in Article 5(1)(d) VBER, the block exemption applies to all types of parity obligation in vertical agreements, provided the market shares of the supplier and the buyer do not exceed 30%. The following guidance is provided for the assessment of the across-platform retail parity obligations defined in Article 5(1)(d) VBER and for other types of parity obligations in individual cases above the market share threshold.

8.2.5.1. Across-platform retail parity obligations

Retail parity obligations which cause a buyer of online intermediation services not to offer, sell or resell goods or services to end users under more favourable conditions using competing online intermediation services, as defined in Article 5(1)(d) VBER, are more likely than other types of parity obligation to produce net anti-competitive effects. Across-platform retail parity obligations may restrict competition as follows:

(a) They may soften competition and facilitate collusion between suppliers of online intermediation services. In particular, it is more likely that a supplier which imposes this type of parity obligation will be able to raise the price or reduce the quality of its intermediation services without losing market share. Irrespective of the price or quality of its services, sellers of goods or services which choose to use its platform are obliged to offer conditions on the platform that are at least as good as the conditions they offer on competing platforms.

(b) They may foreclose entry or expansion by new or smaller suppliers of online intermediation services, by restricting their ability to offer buyers and end users differentiated price-service combinations.

For the assessment of this type of parity obligation, key factors are the share of buyers of the online intermediation services that are covered by the obligations; the homing behaviour of buyers of the online intermediation services and of end users (how many intermediary platforms they use); the market position of the supplier that imposes the obligation and of its competitors; the existence of barriers to entry to the relevant market for online intermediation services, and the impact of direct sales by buyers of the services.

The share of buyers of the online intermediation services that are subject to the parity obligations and the homing behaviour of those buyers are important, as they may indicate that a supplier’s parity obligations restrict competition in respect of a share of demand that exceeds the supplier’s market share. For example, a supplier of online intermediation services may hold a share of 20% of total transactions made using such services, but the buyers upon which it imposes across-platform parity obligations may – because they use multiple platforms – account for more than 50%
of total platform transactions. In that case, the supplier’s parity obligations restrict
competition in respect of more than half of total relevant demand.

340) Buyers of online intermediation services often multi-home in order to reach
customers that single-home (use only one platform) and do not switch between
platforms. Buyer multi-homing is incentivised by platform business models under
which the buyer only has to pay for using the intermediation service when it
generates a transaction. As explained above, multi-homing by buyers of online
intermediation services can increase the share of total demand for such services that
is affected by a supplier’s parity obligations. Second, single homing by end users
may mean that each supplier of intermediation services controls access to a distinct
group of end users. This may increase the supplier’s bargaining power and its ability
to impose parity obligations.

341) The restrictive effects of across-platform retail parity obligations will generally be
most severe where they are used by one or more leading suppliers of online
intermediation services. Where such suppliers have a similar business model, the
parity obligations are likely to reduce the scope for disruption of the model. This type
of obligation may also enable a market leader to maintain its position against smaller
suppliers.

342) Markets for the supply of online intermediation services are often characterised by
significant barriers to entry and expansion, which can aggravate the negative effects
of parity obligations. These markets often feature positive indirect network effects:
new or smaller suppliers of such services find it difficult to attract buyers because
their platforms provide access to insufficient numbers of end users. Where the end
users are final consumers, brand loyalty, single-homing and the lock-in strategies of
incumbent intermediation services suppliers can also create barriers.

343) Buyers of online intermediation services may also sell their goods or services to end
users directly. Such direct sales may constrain the ability of the suppliers of online
intermediation services to raise the price of their services. It is therefore necessary to
assess the share of sales of the intermediated goods or services that are made through
the direct and indirect channels, and the substitutability of these channels, from the
perspective of the suppliers of goods or services and of end users.

344) Across-platform retail parity obligations may produce appreciable restrictive effects
where they are imposed on buyers representing a significant share of total demand
for the relevant online intermediation services. In the case of a cumulative effect,
restrictive effects will generally only be attributed to the parity obligations of
suppliers whose market share exceeds 5%.

345) In principle, retail parity obligations may also be imposed by retailers in relation to
the conditions under which a supplier’s goods or services are offered to end users by
competing retailers. However, where this type of parity obligation relates to price, it
generally requires the supplier of goods or services that accepts the obligation to
impose minimum RPM on the competing retailers that are covered by the obligation.
RPM is a hardcore restriction under the VBER and a restriction by object under
Article 101(1). In cases where undertakings are able to implement such retail parity
obligations in compliance with the rules relating to minimum RPM, the obligations
are covered by the block exemption. Above the block exemption market share
threshold, the guidance provided in paragraphs (337) to (344) of these Guidelines
applies mutatis mutandis.
8.2.5.2. Retail parity obligations relating to direct sales channels

(346) Retail parity obligations imposed by suppliers of online intermediation services relating to the conditions under which buyers of the services may offer goods or services to end users on their direct sales channels (‘narrow’ parity) prevent such buyers from inducing end users to switch to the direct channel by offering more favourable conditions (undercutting). Under certain conditions, in particular where competition for the supply of online intermediation services is limited, narrow parity obligations may allow the suppliers of online intermediation services to maintain a higher price for their services, leading to higher retail prices for the intermediated goods or services on all sales channels. For the assessment of this type of restriction, relevant factors include the market position of the supplier that imposes the parity obligation, the relative size of the direct sales channels covered by the obligation, the substitutability of the direct and indirect channels from the perspective of the suppliers of the goods or services and of end users, and whether the restrictions are imposed by multiple suppliers of intermediation services (cumulative effects).

(347) In addition, under certain conditions, retail parity obligations relating to direct sales channels may indirectly produce restrictive effects equivalent to those produced by across-platform retail parity obligations. In principle, a buyer of online intermediation services that is subject to a narrow retail parity obligation may differentiate its offers across the intermediary platforms that it uses (‘multi-homing’). However, in order to do so, it must offer conditions on its direct channels that are not more favourable than the conditions that it offers on the ‘most expensive’ intermediary platform with which it has a direct channels parity agreement. Depending on factors such as the share of sales made through each channel, the costs of using each channel and the elasticity of demand for the intermediated goods or services across sales channels, there may be insufficient incentives for buyers and suppliers of online intermediation services to engage in trade-offs relating to the price of those services and the conditions under which goods or services are intermediated via the service. This outcome is generally more likely where a significant share of sales takes place through the direct channel and where retail parity obligations relating to direct channels are imposed by multiple suppliers.

(348) Retail parity obligations imposed by suppliers of online intermediation services relating to direct sales channels may produce appreciable restrictive effects where buyers representing a significant share of total demand for the online intermediation services are subject to such obligations or to across-platform retail parity obligations. A similar assessment, following an assessment of the withdrawal of the VBER, may have to be conducted by the Commission or a national competition authority, where the market shares of the relevant suppliers are below the 30% threshold.

8.2.5.3. Parity obligations relating to non-retail conditions

(349) Parity obligations imposed by upstream suppliers of online intermediation services relating to the conditions under which goods or services are offered to undertakings that are not end users are covered by the block exemption. This type of obligation is capable of disincentivising competition between suppliers of online intermediation services in the same way as retail parity obligations, and therefore the guidance provided in paragraphs (337) to (348) of these Guidelines remains relevant. This applies in particular where there is no significant difference between the prices or other conditions under which the intermediated goods or services are offered at the upstream and retail levels, as may be the case where the intermediation concerns
final goods or services. However, for the assessment of this type of parity obligation, it is also necessary to take into account the conditions of competition downstream, that is, between the undertakings which buy the intermediated goods or services.

By contrast, parity obligations relating to the conditions under which goods or services are purchased as inputs by manufacturers, wholesalers or retailers do not directly affect the conditions under which these undertakings compete downstream. The guidance provided for the assessment of retail parity obligations is therefore less likely to be relevant. The main concern associated with parity obligations relating to the conditions under which goods or services are purchased as inputs is that they may reduce the incentives of input suppliers to compete and thereby raise input prices. Relevant factors for the assessment include the relative size and market power of the supplier and buyer that agree the parity obligation, the share of the relevant market covered by similar obligations, and the cost of the input in question relative to buyers’ total costs.

8.2.5.4. Assessment under Article 101(3)

Where parity obligations produce appreciable restrictive effects, possible efficiency justifications need to be assessed under Article 101(3). The most common justification for the use of these obligations by suppliers of online intermediation services is to address a free-rider problem. For example, the suppliers may not have an incentive to invest in the development of their platform, in pre-sales services or demand-enhancing promotion if the benefits of such investments in terms of increased sales go to competing platforms or direct sales channels which can offer the same goods or services on more favourable conditions.

Relevant factors include whether the investments by the supplier of online intermediation services provide objective benefits, that is, whether they add value for consumers; whether the risk of free-riding is real and substantial, and whether the particular type and scope of parity obligation is indispensable for the objective benefits to be achieved. The likely level of free-riding must be sufficient to significantly impact the incentives to invest in the online intermediation service. Evidence of the extent to which users of the intermediation services multi-home is particularly relevant, though it is also necessary to consider whether their behaviour is influenced by the effects of the parity obligations. If the supplier of online intermediation services or its competitors operate in other comparable markets using less restrictive or no parity obligations, this may indicate that the obligations are not indispensable. Where the supply of online intermediation services is highly concentrated and features significant entry barriers, the need to protect residual competition may outweigh possible efficiency gains. Other justifications relating to the general benefits provided by transaction platforms, such as the pooling of suppliers’ promotional expenditure, increased price transparency or reduced transaction costs will only fulfil the conditions of Article 101(3) if the supplier of online intermediation services can show a direct causal link between the benefit claimed and the use of the particular type of parity obligation.

In general, retail parity obligations relating to direct sales channels are more likely to fulfil the conditions of Article 101(3). This is primarily because their restrictive conditions are more closely related to the downstream competition. However, in some cases, the parity obligation may refer to conditions offered at both the upstream and retail levels.

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121 In some cases, the parity obligation may refer to conditions offered at both the upstream and retail levels.
effects are generally less severe than those of across-platform parity obligations and therefore more likely to be outweighed by efficiencies. Moreover, the risk of free riding by suppliers of goods or services via their direct sales channels may be higher, as these suppliers generally earn a higher per unit margin on sales in their direct channel than on indirect sales.

8.2.6. **Upfront access payments**

(354) Upfront access payments are fixed fees that suppliers pay to distributors in the framework of a vertical relationship at the beginning of a relevant period, in order to get access to their distribution network and remunerate services provided to the suppliers by the retailers. This category includes various practices such as slotting allowances,\(^{122}\) the so called pay-to-stay fees,\(^ {123}\) payments to have access to a distributor's promotion campaigns etc. This section provides guidance for the assessment of upfront access payments in individual cases above the market share threshold stipulated in Article 3 VBER.

(355) Upfront access payments may sometimes result in anticompetitive foreclosure of other distributors. For example, a high fee may incentivise a supplier to channel a substantial volume of its sales through one or a limited number of distributors in order to cover the costs of the fee. In such a case, upfront access payments may have the same downstream foreclosure effect as an exclusive supply type of obligation. To assess the likelihood of this type of negative effect, the guidance relating to exclusive supply obligations may be applied by analogy (in particular paragraphs (305) to 310)).

(356) Exceptionally, upfront access payments may result in anticompetitive upstream foreclosure effects. For example, if the distributor has a strong bargaining position, or where the use of upfront access payments is widespread, such payments may increase barriers to entry for small suppliers. To assess the likelihood of this type of negative effect, the guidance relating to single branding obligations may be applied by analogy (in particular paragraphs (284) to (293) of these Guidelines). The assessment must also take into account whether the distributor in question sells competing products under its own brand. In that case, horizontal concerns may also arise, with the consequence that the block exemption does not apply, pursuant to Article 2(4) VBER (see section 4.4.3. of these Guidelines).

(357) In addition to possible foreclosure effects, upfront access payments may soften competition and facilitate collusion between distributors. Upfront access payments are likely to increase the price charged by the supplier for the contract products since the supplier must cover the expense of such payments. Higher supply prices may reduce the incentive of the retailers to compete on price on the downstream market, while the profits of distributors are increased as a result of the access payments. Such reduction of competition between distributors through the cumulative use of upfront access payments normally requires the distribution market to be highly concentrated.

(358) However, the use of upfront access payments may in many cases contribute to an efficient allocation of shelf space for new products. When suppliers launch new products, distributors often have less information than the supplier about whether the

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\(^{122}\) Fixed fees that manufacturers pay to retailers in order to get access to their shelf space.

\(^{123}\) Lump sum payments made to ensure the continued presence of an existing product on the shelf for some further period.
new product is likely to be successful and, as a result, they may stock sub-optimal quantities of the product. Upfront access payments may be used to reduce this asymmetry in information between suppliers and distributors, by explicitly allowing suppliers to compete for shelf space. The distributor may thus receive advance warning about which products are most likely to be successful since a supplier will normally only agree to pay an upfront access fee if it considers there is a low probability that the product launch will fail.

(359) Furthermore, due to the asymmetry in information mentioned in the previous paragraph, suppliers may have incentives to free-ride on distributors’ promotional efforts in order to introduce sub-optimal products. If a product is not successful, the distributors will pay part of the costs of the product failure. The use of upfront access payments may prevent such free riding by shifting the risk of product failure back to the suppliers, thereby contributing to an optimal rate of product launches.

8.2.7. Category Management Agreements

(360) Category management agreements are agreements by which, within a distribution agreement, the distributor entrusts the supplier (the ‘category captain’) with the marketing of a category of products including in general not only the supplier’s products, but also the products of its competitors. The category captain may thus have an influence on for instance the product placement and product promotion in the shop and product selection for the shop. Category management agreements are covered by the block exemption when neither the category captain’s nor the distributor’s market shares exceed 30%, and provided that such an agreement does not include hardcore restrictions, for example restrictions of the distributor’s ability to determine its sale price within the meaning of Article 4(a) VBER.

(361) In most cases, category management agreements do not raise concerns under Article 101. However, they may sometimes distort competition between suppliers, and result in anticompetitive foreclosure of other suppliers, where the category captain is able, due to its influence over the marketing decisions of the distributor, to limit or disadvantage the distribution of products of competing suppliers.

(362) In general, distributors will not have an interest in limiting their choice of products. However, they may have incentives to exclude certain suppliers, in particular when the distributor also sells competing products under its own brand. To assess the likelihood of such an upstream foreclosure effect, the guidance relating to single branding obligations may be applied by analogy (in particular paragraphs (284) to (293) of these Guidelines). In particular, this assessment must take into account, on the one hand, the market coverage of the category management agreements and the possible cumulative use of such agreements and, on the other hand, the market position of competing suppliers and the distributor.

(363) In addition, category management agreements may facilitate collusion between distributors when the same supplier serves as a category captain for all or most of the competing distributors on a market and provides these distributors with a common point of reference for their marketing decisions.

(364) Category management may also facilitate collusion between suppliers through increased opportunities to exchange sensitive market information via retailers, such as for instance information related to future pricing, promotional plans or advertising campaigns. The VBER does not cover such direct information exchanges between competitors, see paragraph (83) of these Guidelines.
However, the use of category management agreements may also lead to efficiencies. Category management agreements may allow distributors to have access to the supplier’s marketing expertise for a certain group of products and to achieve economies of scale, as they ensure that the optimal quantity of products is presented timely and directly on the shelves. In general, the higher the inter-brand competition and the lower consumers’ switching costs, the greater the economic benefits achieved through category management.

8.2.8. Tying

Tying refers to situations where customers that purchase one product (the tying product) are required also to purchase another distinct product (the tied product) from the same supplier or someone designated by the latter. Tying may constitute an abuse within the meaning of Article 102. Tying may also constitute a vertical restraint within the meaning of Article 101 where it results in a single branding type of obligation (see paragraphs (281) to (302) of these Guidelines) for the tied product. Only the latter situation is dealt with in these Guidelines.

Whether products will be considered as distinct depends on customer demand. Two products are distinct where, in the absence of the tying, a substantial number of customers would purchase or would have purchased the tying product without also buying the tied product from the same supplier, thereby allowing stand-alone production for both the tying and the tied product. Evidence that two products are distinct could include direct evidence that, when given a choice, customers purchase the tying and the tied products separately from different sources of supply, or indirect evidence, such as the presence on the market of undertakings specialised in the manufacture or sale of the tied product without the tying product, or evidence indicating that undertakings with little market power, particularly on competitive markets, tend not to tie or not to bundle such products. For instance, since customers want to buy shoes with laces and it is not practicable for distributors to lace new shoes with the laces of their choice, it has become commercial usage for shoe manufacturers to supply shoes with laces. Therefore, the sale of shoes with laces is not a tying practice.

Tying may lead to anticompetitive foreclosure effects on the tied market, the tying market, or both at the same time. The foreclosure effect depends on the tied percentage of total sales on the market of the tied product. On the question of what can be considered appreciable foreclosure under Article 101(1), the analysis for single branding can be applied. Tying means that there is at least a form of quantity-forcing on the buyer in respect of the tied product. Where in addition a non-compete obligation is agreed in respect of the tied product, this increases the possible foreclosure effect on the market of the tied product. The tying may lead to less competition for customers interested in buying the tied product, but not the tying product. If there is not a sufficient number of customers that will buy the tied product alone to sustain competitors of the supplier on the tied market, the tying can lead to those customers facing higher prices. If the tied product is an important

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complementary product for customers of the tying product, a reduction of alternative suppliers of the tied product and hence a reduced availability of that product can make entry onto the tying market alone more difficult.

(369) Tying may also directly lead to prices that are above the competitive level, especially in three situations. First, if the tying and the tied product can be used in variable proportions as inputs to a production process, customers may react to an increase in price for the tying product by increasing their demand for the tied product while decreasing their demand for the tying product. By tying the two products the supplier may seek to avoid this substitution and as a result be able to raise its prices. Second, when the tying allows price discrimination according to the use the customer makes of the tying product, for example the tying of ink cartridges to the sale of photocopying machines (metering). Third, when in the case of long-term contracts or in the case of after-markets with original equipment with a long replacement time, it becomes difficult for the customers to calculate the consequences of the tying.

(370) Tying is exempted under the Block Exemption Regulation when the market share of the supplier, on both the market of the tied product and the market of the tying product, and the market share of the buyer, on the relevant upstream markets, do not exceed 30%. It may be combined with other vertical restraints, which are not hardcore restrictions under that Regulation, such as non-compete obligations or quantity forcing in respect of the tying product, or exclusive sourcing. The remainder of this section provides guidance for the assessment of tying in individual cases above the market share threshold.

(371) The market position of the supplier on the market of the tying product is obviously of central importance to assess possible anti-competitive effects. In general, this type of agreement is imposed by the supplier. The importance of the supplier on the market of the tying product is the main reason why a buyer may find it difficult to refuse a tying obligation.

(372) The market position of the supplier’s competitors on the market of the tying product is important in assessing the supplier’s market power. As long as its competitors are sufficiently numerous and strong, no anti-competitive effects can be expected, as buyers have sufficient alternatives to purchase the tying product without the tied product, unless other suppliers are applying similar tying. In addition, entry barriers on the market of the tying product are relevant to establish the market position of the supplier. When tying is combined with a non-compete obligation in respect of the tying product, this considerably strengthens the position of the supplier.

(373) Buying power is relevant, as important buyers will not easily be forced to accept tying without obtaining at least part of the possible efficiencies. Tying not based on efficiency is therefore mainly a risk where buyers do not have significant buying power.

(374) Where appreciable anti-competitive effects are established, the question whether the conditions of Article 101(3) are fulfilled arises. Tying obligations may help to produce efficiencies arising from joint production or joint distribution. Where the tied product is not produced by the supplier, an efficiency may also arise from the supplier buying large quantities of the tied product. For tying to fulfil the conditions of Article 101(3), it must, however, be shown that at least part of these cost reductions are passed on to the consumer, which is normally not the case when the retailer is able to obtain, on a regular basis, supplies of the same or equivalent products on the same or better conditions than those offered by the supplier which
applies the tying practice. Another efficiency may exist where tying helps to ensure a certain uniformity and quality standardisation (see paragraph (14)(h)). However, it needs to be demonstrated that the positive effects cannot be realised equally efficiently by requiring the buyer to use or resell products satisfying minimum quality standards, without requiring the buyer to purchase these from the supplier or someone designated by the latter. The requirements concerning minimum quality standards would not normally fall within the scope of Article 101(1). Where the supplier of the tying product imposes on the buyer the suppliers from which the buyer must purchase the tied product, for instance because the formulation of minimum quality standards is not possible, this may also fall outside the scope of Article 101(1), especially where the supplier of the tying product does not derive a direct (financial) benefit from designating the suppliers of the tied product.
What Happens Next to Antitrust—in 6 Questions

JOSHUA H. SOVEN

We are in a bull market for debate about antitrust policy. The rapid growth and size of some companies, new business models, and increased focus on the labor markets have generated a volatile discussion about the future of antitrust policy and enforcement.

For many, the back and forth involves heroes and villains, new friends and old foes, and antitrust “school” rivalries. This dynamic is healthy—it promotes candid discussion and new thinking. But the intensity of the debate can cloud the practical implications of the policy choices for businesses. This article unpacks some of those implications by analyzing six questions. And while everyone has an agenda (and I have mine), I do not focus on what I think should happen, but on what I think will happen, and how businesses should prepare for what happens next.

1. What is antitrust trying to accomplish?

The next phase of antitrust will depend a lot on what the Biden administration decides is the purpose of the antitrust laws. Complete consensus on the objectives of antitrust has never existed. Until the 1970s, prosecutors and the courts often applied the antitrust laws to protect small businesses and to try to preserve and restore unconcentrated market structures. The impact of conduct on consumers and economic efficiency mattered, but not as much as it does today.

Next came about two decades of accepting, rejecting, and modifying the Chicago School’s position that antitrust should focus on price and economic efficiency, after which antitrust policy had a pretty soft landing on the consumer welfare standard. In 2005, Professor Herbert Hovenkamp, the author of the leading antitrust treatise, described the state of play: “[T]oday we enjoy more consensus about the goals of the antitrust laws than at any time in the last half century. . . . Few people dispute that antitrust’s core mission is protecting consumers’ right to the low prices, innovation, and diverse production that competition promises.”

Professor Hovenkamp probably overstated the level of agreement about whether the consumer welfare standard protects “diverse production.” But he was right that there has been consensus that the antitrust agencies should focus on challenges to conduct that increases prices and/or reduces levels of quality and innovation. The number of competitors in a market matters when it informs the analysis of conduct’s effects on customers, but preserving a particular market structure has not been an end in itself.

Reflecting this consensus, in June 2021, the Supreme Court, in essence, described the consumer welfare standard in its unanimous decision that held that certain restrictions on compensation for student-athletes imposed by the National Collegiate Athletic Association violated Section 1 of the Sherman Act: “[It is] a fact-specific assessment of market power and market structure aimed at assessing the challenged restraint’s actual effect on competition—especially its capacity to reduce output and increase price.”

Members of the Biden administration (in their writings) have argued that “excessive market power is a serious problem” in the United States and raised two concerns about the consumer welfare standard. First, some assert that the standard does not reliably cover conduct that generates short-term benefits for consumers, but potentially could produce harms to competition in the long run. For example, they think that the consumer welfare standard does a poor job of stopping large companies from reducing prices below costs, which they believe can over time reduce the number of competitors and innovation. Professor Timothy Wu (the Special Assistant to President Biden for Technology and Competition Policy) put it this way:

Emphasis on measurable harms to consumers still tends to bias the law toward a focus on static harms and, especially, on prices. Such “price fixation” inevitably tends to marginalize parts of the antitrust law concerned with dynamic harms—harms like the blocking of potential competition, slowing of innovation, loss of quality competition, and overall industry stagnation.

The second concern among Biden administration officials is that the consumer welfare standard does not achieve what they believe was Congress’ central goal for the antitrust...
laws—to prevent the “excessive concentrations of economic power,” by protecting smaller businesses, suppliers, and labor. FTC Chair Lina Khan has written:

Focusing antitrust exclusively on consumer welfare is a mistake. For one, it betrays legislative intent, which makes clear that Congress passed antitrust laws to safeguard against excessive concentrations of economic power. This vision promotes a variety of aims, including the preservation of open markets, the protection of producers and consumers from monopoly abuse, and the dispersion of political and economic control. Secondly, focusing on consumer welfare disregards the host of other ways that excessive concentration can harm us—enabling firms to squeeze suppliers and producers, endangering system stability (for instance, by allowing companies to become too big to fail), or undermining media diversity, to name a few.9

Chair Khan, Professor Wu, and others in the Biden administration want to replace the consumer welfare standard with a benchmark that focuses on protecting the “competitive process.”10 Professor Wu has written that to develop this approach “will require much further work and practice to arrive at practicable standards,” but that “the basic question is whether the complained-of conduct is competition on the merits, or, rather, an effort to disable or divert the competitive process.”11 “This is a test primarily focused on protection of a process, more specifically, which is different than the maximization of a value.”12 Professor Wu wrote that the competitive process standard is “not ultimately tied to arguments about whether, in the final analysis, consumer welfare has been served or not.”13

The courts will not replace or modify the consumer welfare standard overnight. But the desire to do so by members of the Biden administration will produce immediate consequences for businesses. Many antitrust investigations are resolved at the agencies, without litigation. (Lawyers like trials; most companies do not.) The Biden administration will, in many cases, investigate the wide set of issues raised by those who favor the competitive process standard. This will lengthen some investigations and expand the scope of the information the parties need to produce. For example, the antitrust agencies have already started to ask for more information about how transactions affect labor markets.

To reduce regulatory risk and manage investigation costs, companies will need to broaden the scope of their advocacy to go beyond price effects and incentives to innovate. From the outset, companies should have thorough presentations that address the transaction’s effects on smaller businesses and other competitors, labor rates, unions, and diversity of consumer choice. For high-profile transactions, companies will often need to make presentations to Congress, other federal agencies, labor organizations, political interest groups, and other stakeholders.

In litigation, the push to replace the consumer welfare standard will increase risks for defendants in some circumstances, but it will also present strategic opportunities. The DOJ’s and FTC’s litigators have often benefited from the consumer welfare standard because it requires them to hit only a single evidentiary target—showing that the defendants planned to increase prices, drop levels of output or service, and/or reduce innovation. The standard also has helped the antitrust agencies defeat efficiencies defenses in merger cases because, as applied by the courts, companies must show that they will pass most or all of the efficiencies on to customers.14

In contrast, the “competitive process” standard is broader and less precise, which will leave room for businesses to urge the courts to adopt favorable interpretations. And if a variety of welfare concerns become relevant in antitrust litigation—concentration of power, labor, suppliers, etc.—businesses can advocate that the courts should incorporate these factors into the analysis. For example, companies can sometimes make credible arguments that a merger will help them avoid layoffs, increase wages, and support unions.

In addition, a renewed emphasis on “market structure” and protection of smaller businesses will present strategic opportunities for businesses in litigation if it causes the courts to place greater emphasis on old-style market definition. For several decades, the primary litigation obstacle that the antitrust agencies faced was not the Chicago School’s de-emphasis of market structure, but the inability to prove a traditional market structure in the first place. To deal with this problem, the antitrust agencies successfully advocated for a more flexible view of market definition that used econometric tools to measure the relative intensity of price and quality competition between companies.15 This has produced big benefits for the antitrust agencies in litigation. For example, the FTC’s flagship hospital merger enforcement program often sidesteps traditional market definition and policy objectives favored by some critics of the consumer welfare standard (e.g., wages and impacts on suppliers). Instead, the program hinges on an FTC economic model that has a singular focus on whether a merger is likely to increase prices to the hospitals’ customers.

2. Does antitrust policy play dice with competition?24

On the surface, the antitrust debate is about legal doctrine. But the substance of the disagreements largely boils down to how much risk to take that conduct will reduce competition.

In an enforcement framework, the risk issue reduces to two questions. First, what “probability of harm” test should the agencies and the courts use to determine antitrust liability? For example, does conduct violate the antitrust laws if there is a 51 percent chance that it will reduce competition? Second, what is the plaintiff’s burden of proof in court (e.g., a preponderance of the evidence) to show that the probability test is satisfied?

In the 131 years since Congress passed the Sherman Act, neither the antitrust agencies nor the courts have answered these two questions with precision. Instead, the agencies and courts have adopted a variety of presumptions and burden-shifting mechanisms to resolve antitrust cases.

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Nevertheless, I think that the DOJ’s and FTC’s litigators believe that to win a case, they need to prove that it is more likely than not that conduct will cause a material and foreseeable reduction in competition. And this belief affects case selection. For example, the antitrust agencies generally do not challenge acquisitions of a “nascent” competitor when there is only a very low chance of a loss of competition (e.g., below 5 percent).

The Biden administration, its advisors, and some members of Congress believe that antitrust enforcers have wrongly erred on the side of under-enforcement. To address this, they want to (1) lower the risk thresholds that the agencies use when they decide whether to bring an enforcement action, and (2) reduce the agencies’ burden of proof to demonstrate that conduct violates the antitrust laws. For example, Professor Wu has written that the antitrust agencies have applied too high a standard when they decide whether to challenge acquisitions of nascent competitors by large technology companies.17

Relatively, six prominent antitrust practitioners and scholars, including Professor Wu, published a report that advocates for legislation that “under some circumstances [makes] conduct that creates a risk of substantial harm [] unlawful even if the harm cannot be shown to be more likely than not.”18

The views of these practitioners and scholars are reflected in bills pending in Congress. These bills would: (1) prohibit certain acquisitions by large companies; (2) expand the types of conduct for which there is a presumption of illegality; (3) shift burdens of proof to the defendants for certain cases; (4) lower the government’s burden of proof in merger cases; (5) require that large technology platforms avoid preferencing their own products and services and make data available to competitors; and (6) most dramatically, could require the breakup of some large technology platforms.19

Similar to the Biden administration’s doubts about the consumer welfare standard, this risk-averse dynamic will affect antitrust enforcement policy, particularly if the antitrust agencies receive more funding. For example, the administration’s antitrust team will scrutinize a number of acquisitions by large companies that, until recently, the agencies would have cleared quickly because they do not create a material risk of foreseeable harm to consumers. The implications for businesses are substantial.

First, in this environment, some companies facing an antitrust investigation should accelerate the production of ordinary course of business documents that can demonstrate that there is no significant risk of a loss of competition or harm to the competitive process. This approach can avoid the delays that can occur when the agency intends to conduct an extensive investigation. An incrementalist approach by companies under investigation, which was always an overrated strategy, will become more likely to prolong investigations, raise costs, and increase business risks.

Second, “hot” documents will present even greater risks to businesses than they do today. While often packaged as if it is a hard science, antitrust remains an imprecise discipline. Bad “intent” documents will both put pressure on and make it easier for the Biden administration to challenge conduct that has a relatively low probability of causing competitive harm. Professor Wu has explained: “[E]vidence of an anti-competitive plan is a particularly important guide in this area. Such intent might be subjectively expressed through testimony or internal writings. The enforcer or factfinder essentially borrows a party’s expertise to help form a judgment about competitive effects.”20

In this environment, hot documents will also make it much easier for courts to resolve ambiguities against companies. It will become exceptionally important that company officials describe their conduct and competitors accurately, and with precision. Hyperbole that may look harmless at the time could generate a government lawsuit.

Third, if pending antitrust bills become law, it will likely require businesses to change litigation strategies. Some of the proposed legislation effectively puts the burden of proof on the defendants for certain conduct. This may cause courts to give the defendants greater latitude to obtain substantial discovery from the government’s witnesses and other third parties.

Putting the burden on the defendants might also cause some courts to allow the defendants to go first at trial, which will enable the parties to cross-examine the government’s witnesses in the defendants’ case in chief. Relatedly, if litigation becomes more about the competitive process and less about consumer welfare, it could put more pressure on the antitrust agencies to sponsor credible testimony from third-party competitors who allegedly will be harmed by the defendants’ conduct. To prepare a witness properly for trial requires a substantial investment of time and resources. Even officials from third parties who agree to testify at trial for the DOJ or the FTC often are reluctant to make this commitment.

3. Who really is at the top of the antitrust pyramid?21

The Biden administration may or may not dent the U.S. antitrust law universe,22 but, either way, European competition agencies probably will present the biggest regulatory risk to many U.S. companies over the next five years. The political and economic forces that will produce more aggressive enforcement in the United States are just as strong in Europe. And European competition agencies generally do not need to go to court to stop mergers and other conduct, which gives them more latitude to bring enforcement actions that could present substantial litigation risks in the United States. Moreover, the U.S. antitrust agencies may urge European authorities to stop conduct that they doubt they can challenge under U.S. law.

Two recent developments illustrate the increased antitrust risks to U.S. companies from competition authorities in Europe. First, in March 2021, the European Commission...
(EC) implemented a rule that expands the number of smaller transactions that the Commission can review in order to give the EC greater ability to review transactions that involve nascent competitors, even when the nascent firm has little or no revenue. The rule enables EC member countries to request that the EC review any merger that does not meet the EU merger thresholds, but “affects trade between Member States” and “threatens to significantly affect competition” within the territory of that member country, regardless of whether it meets the thresholds in that Member State. The Guidance also provides for post-closing referrals regardless of whether the referral complies with current statutory requirements.

Businesses should expect that the EC will use this expanded authority frequently. In May 2021, the European Commission used the authority to open an investigation of Illumina’s proposed acquisition of GRAIL. Because the EC investigation barred the parties from closing, the FTC moved to dismiss its federal litigation complaint that sought to enjoin the deal pending a lengthier administrative trial at the FTC. Companies need to plan for member countries to make such referrals to the EC on their own initiative. They also need to account for (offensively and defensively) the ability of private parties with strategic interests in a deal to urge member states to make such referrals to the EC.

Second, since Brexit, the United Kingdom’s Competition and Markets Authority (CMA) has stepped up its level of scrutiny of transactions, particularly those in the technology and medical technology sectors that involve nascent or adjacent competitors. For example, in 2020, just two days after the U.S. District Court for the District of Delaware denied the DOJ’s attempt to block Sabre’s acquisition of Farelogix, the CMA stopped the transaction. Notably, the Antitrust Division’s Assistant Attorney General at that time praised the CMA’s decision in a DOJ press release.

Handling a regulatory review in Europe was already analogous to three-dimensional chess. The latest developments add even more dimensions. The issues that will become more complex include: drafting risk allocation covenants for merger agreements; decisions about which European authorities to notify about a transaction; assessments about whether third parties will push for investigations to advance their strategic interests; and whether and how to discuss competition reviews in Europe with the U.S. antitrust agencies.

4. Does anyone “feel the need for speed” in merger reviews? Commentators have written millions of words about potential changes to the antitrust law that governs mergers, but remarkably few about how to make antitrust merger reviews go faster. The antitrust agencies have rolled out initiatives intended to streamline merger investigations. However, these initiatives have had only modest effect. Instead, as the DOJ recently wrote in a submission to the Surface Transportation Board, “Mergers subject to the HSR Act can occasionally take a year or more to reach final decision.”

Merger process reforms do not stick in part because many at the DOJ and the FTC doubt that they serve the agencies’ interests when they review large strategic transactions. Rather, they think that the agencies benefit from a lot of time to investigate such transactions and to prepare for litigation. Parties (and their lawyers) are also responsible for the modest success of merger process reforms. Many parties decide not to respond rapidly to a Second Request because they think that it will make the agencies hostile to their deal and that with more time the agencies “will come around.”

Although there are credible arguments why a faster merger review process would produce substantial benefits for the antitrust agencies and the parties in many matters, there are no signs of change to the status quo. If the Biden administration does speed up merger investigations, the following factors will probably drive reform:

First, the antitrust agencies and the parties realize that technology now enables the merging parties to produce in three months the information that the agencies use to make most enforcement decisions: documents from the files of 10–15 senior officials; financial databases; and win-loss data. It might take a month or two longer for the agencies to obtain the information they need from third parties, but no more than that.

Second, the parties involved in a Second Request investigation decide that it is in their interest to push for an agreement with the antitrust agencies that enables them to complete the investigation in seven months and complete any litigation in four months. This schedule would enable a district court to issue a ruling within one year after the HSR filing, a rarity today.

Third, the antitrust agencies really commit to relying on structural presumptions, and conclude that they do not benefit from long discovery schedules and multi-week trials where the bulk of the time is spent litigating why a presumption is not informative about the transaction’s likely competitive effects. Relatedly, merger reviews will accelerate if the agencies decide that it is not in their interests to give the parties many months to unilaterally construct their own remedies that put the agencies in the defensive position of “litigating the fix.”

5. Will antitrust enforcers stop worrying and learn to love regulation? If you tell a lawyer or economist who works at the Antitrust Division or the FTC that they are a regulator, they usually respond with a cross look. They view their work as law enforcement, not regulation. And they have a point; much of the justification for robust antitrust enforcement is to avoid regulation.

Today, politicians, commentators, and antitrust lawyers across the political spectrum are pushing away historic
concerns about antitrust getting into the regulation business. They reason that antitrust enforcement tools, by themselves, are not adequate to protect competition. FTC Chair Khan has written that “reliance on case-by-case adjudication yields a system of enforcement that generates ambiguity, unduly drains resources from enforcers, and deprives individuals and firms of any real opportunity to democratically participate in the process.”36 In her prominent article on Amazon, Chair Khan discusses how, given her view that “Amazon increasingly serves as essential infrastructure across the internet economy, applying elements of public utility regulations to its business is worth considering.”37 Political conservatives are also calling for various regulations. Supreme Court Justice Thomas recently wrote in a concurring opinion that “[t]here is a fair argument that some digital platforms are sufficiently akin to common carriers or places of accommodation to be regulated.”38 And there is a Republican co-sponsor for each of the bills introduced in the House, some of which would effectively regulate large technology companies.

In addition, there is substantial interest in regulation in Europe. In December 2020, the European Commission proposed the Digital Markets Act, which would impose extensive regulations on some digital platforms, including interoperability and data-sharing requirements.39 Similar to FTC Chair Khan, European Commission Executive Vice President Margrethe Vestager explained that she thought that regulation was necessary because antitrust enforcement was not sufficient.40 Whether Congress will legislate, or the administration will adopt, competition-focused regulations is uncertain. But the Biden administration’s interest in regulation will produce effects right away. Many companies will approach the administration to advocate for new rules. Businesses, whether they favor or oppose regulations, will need to prepare to respond offensively or defensively. Ironically, the DOJ and the FTC could serve as the best place for companies to express concerns that proposed new federal regulations could reduce competition and impede enforcement efforts. Over the years, the antitrust agencies have actively engaged in “competition advocacy” that critiqued new regulations that limit competition.

Businesses will also need to plan for the possibility that new competition-oriented regulations will implicate the often messy, and litigation-intensive, preemption and antitrust preclusion doctrines, as happened in the Credit Suisse and Trinko cases. Companies have used these doctrines to block public and private antitrust enforcement on the ground that regulations govern the conduct at issue and “displace” the antitrust laws. In Credit Suisse, the Supreme Court held that the securities regulations implicitly precluded the application of the antitrust laws to investment banks that alleged formed syndicates to help execute initial public offerings.41 And most famously, in the Trinko case, a unanimous Supreme Court rejected a Section 2 complaint against Verizon in part because Verizon and the conduct at issue were subject to regulatory oversight by the Federal Communications Commission.42

6. What about the people in the arena?

In 1910, President Theodore Roosevelt credited the individual who is “in the arena” over the “critic.”43 Roughly a century later, ESPN television anchor Kenny Mayne commented on SportsCenter that “we all know that games aren’t played on paper; they are played by little men inside our TV sets.”44 Roosevelt’s speech had more impact than Mayne’s joke, but they were making the same point: Events are not self-executing and the participants determine the outcome. This is true for antitrust enforcement too. Where the antitrust agencies (and businesses) have succeeded, it is often due to detailed and innovative fact-gathering work and implementing creative and aggressive litigation strategies. Antitrust doctrine matters, but it is never sufficient. The paradigm of this reality is, of course, the FTC’s successful hospital merger enforcement program. Much of the innovation of the program was to develop new litigation strategies and then successfully execute those strategies in courtrooms throughout the country.

Important litigation innovations also came from how the attorneys at the Antitrust Division and the FTC prosecuted unilateral effects cases, which substantially increased the agencies’ win rate. For example, Antitrust Division and FTC attorneys deemphasized customer testimony in favor of aggressive cross-examinations of the parties’ witnesses in their affirmative case. The Antitrust Division also used timing agreements to incentivize the parties to produce documents quickly from key executives and then took litigation-style depositions of those executives during the investigation to obtain a transcript suitable to use on cross-examination at trial.45 Similarly, companies (and their counsel) that lost government antitrust litigation challenges implemented new strategies that enabled them to win subsequent cases. For example, companies decided not to sponsor economic models that purported to show how a market performed and instead showed that the government’s models did not accurately represent the facts on the ground.

We have not reached the end of history in developing and implementing better tools to investigate, prosecute, and defend antitrust cases. The current enforcement actions against large technology companies, with presumably more to come, will produce new strategies for handling high-profile antitrust enforcement matters. The reality (unsettling for some) is that these strategies, and how well they are executed, could have a greater impact on the outcomes of future antitrust enforcement actions than will changes to the antitrust laws.
At last count, the “schools” of antitrust are: Neo-Brandeian, Chicago, Neo-Chicago, Post-Chicago, and Harvard.

Credit for the title of this article goes to my friend Larry Bernstein who hosts the program What Happens Next In 6 Minutes. Mr. Bernstein started the program in March of 2020 in response to the Covid-19 pandemic. See What Happens Next In 6 Minutes, https://www.whathappensnextin6minutes.com/.


See Brown Shoe Co. v. United States, 370 U.S. 294, 333 (1962) (“[W]e must consider its probable effects upon the economic way of life sought to be preserved by Congress. Congress was desirous of preventing the formation of further oligopolies with their attendant adverse effects upon local control of industry and upon small business. Where an industry was composed of numerous independent units, Congress appeared anxious to preserve this structure.”) (footnote omitted).


See Wu, supra note 8, at 5.

Id. at 7, 8.

Id. at 7.

Id. at 9 (emphasis added).

See, e.g., FTC v. Staples, Inc., 970 F. Supp. 1066, 1090 (D.D.C. 1997) (“[T]he Court also finds that the defendants’ projected pass through rate— the amount of the projected savings that the combined company expects to pass on to customers in the form of lower prices—is unrealistic. . . . [T]he evidence shows that, historically, Staples has passed through only 15–17%.”).


Albert Einstein famously stated that “[G]od does not play dice” with the universe. See Walter Isaacson, Einstein: His Life and Universe 335 (Simon & Schuster ed. 2007).


Hemphill & Wu, supra note 17, at 1882 (footnote omitted).

The phrase “top of the pyramid” comes from Tom Wolfe’s The Right Stuff (1979), See, e.g., Tom Wolfe, The Right Stuff 531 (Farrar, Straus, and Giroux ed. 2008).

The “dent in the universe” phrase is attributed to Steve Jobs. See Walter Isaacson, Steve Jobs: A Biography 92, 112 (Simon & Schuster ed. 2011).


Eur. Comm’n, Daily News 20/04/2021 (Apr. 20, 2021), https://ec.europa.eu/competition/pressroom/detail/en/mex_21_1846 (“The European Commission has accepted the requests submitted by Belgium, France, Greece, Iceland, the Netherlands, and Norway to assess the proposed acquisition of GRAIL by Illumina under the EU Merger Regulation. . . . Illumina cannot implement the transaction before notifying and obtaining clearance from the Commission.”).

Press Release, Maribeth Petrizzi, Bureau of Competition Director, Statement of FTC Acting Bureau of Competition Director Maribeth Petrizzi on Bureau’s Motion to Dismiss Request for Preliminary Relief in Illumina/ GRAIL Case (May 20, 2021), https://www.ftc.gov/news-events/press-releases/2021/05/statement-ftc-acting-bureau-competition-director-maribeth (“At the time, a district court order was necessary to prevent the parties from consummating their merger . . . . Now that the European Commission is investigating, Illumina and GRAIL cannot implement the transaction without obtaining clearance from the European Commission.”).


The United Kingdom’s CMA decision to block Sabre’s acquisition of Farelogix confirms our view that the merger was anticompetitive."

The phrase “feel the need for speed” comes from the 1986 film Top Gun. See Top Gun (Paramount Pictures 1986).


Press Release, Statement from Assistant Attorney General Makan Delrahim on Sabre and Farelogix Decision to Abandon Merger (May 1, 2020), https://www.ftc.gov/news-events/press-releases/2021/05/statement-ftc-acting-bureau-competition-director-maribeth (“At the time, a district court order was necessary to prevent the parties from consummating their merger . . . . Now that the European Commission is investigating, Illumina and GRAIL cannot implement the transaction without obtaining clearance from the European Commission.”).

37 Amazon's Antitrust Paradox, supra note 9, at 798.
Criminal Antitrust Enforcement:
Individualized Justice in Theory and Practice

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Remarks as Prepared for the
University of Southern California Gould School of Law
Center for Transnational Law and Business
First Annual Symposium on
Corporate Enforcement and Individual Accountability

Los Angeles, California

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It is an honor to speak here today, at what I know will be the first of many informative programs on the important topics of corporate enforcement and individual accountability. This is an exciting time for the Antitrust Division, for many reasons, one of which is that just yesterday President Biden announced that he plans to nominate Jonathan Kanter as our Assistant Attorney General. The Division’s career officials and staff—myself included—eagerly await his arrival and look forward to carrying out his priorities. Of course, right now I can’t speak to what those priorities will be, and my remarks today should not be taken as an indication otherwise. But I welcome the opportunity to reflect on the recent accomplishments of the Division’s Criminal Program, which I have now been leading for over three years, and shed some light on the principles underlying that work.

I. Theory

Everything I will say today starts from one simple premise. At the Antitrust Division, our criminal enforcement mission is to deter, detect, and prosecute crimes that corrupt markets and prevent fair, open competition. Our goal is to always carry out that mission in a principled, transparent, and predictable way. We set clear rules. And we make sure those rules can be understood. Not just by the most sophisticated businesses and antitrust lawyers, but by everyone.
The reason for that may be obvious, but it bears repeating, particularly because the same concept is at the heart of the Division’s unique mission. Our job is to stop criminals from cheating the system and skewing the economy’s playing field in their favor. In the same way, it is critical that everyone who appears before the Division is on a level playing field. The outcome the Division reaches in a particular case should not—and does not—depend on whether defense counsel has special access or inside information about how we make decisions or what factors we consider. Nor does the Division’s treatment of defendants depend on the resources and influence they wield or preconceived notions that certain companies or industries should be treated more leniently because of their size or the markets in which they operate.

In contrast, when we consistently apply written, publicly available policies and guidance to the facts of each case, and when we make our decisionmaking principled and transparent, that increases confidence in our justice system. It guarantees that we, as prosecutors, come to well-reasoned, equitable outcomes. And finally, it ensures that subjects, targets, and defendants know what to expect and are treated—and, where warranted, punished—based on appropriate considerations.
As Department policy reminds us, “equal justice depends on individualized justice, and smart law enforcement demands it.”¹ Put another way, when we take a process-driven approach based on the unique facts of each case, justice is equally available to all. It means that businesses and executives know what to expect and can make risk assessments accordingly. When that system works properly, fewer antitrust crimes occur, which in turn allows Americans to benefit from the free-market competition on which our economic system is premised.

We are constantly working to administer equal, individualized justice. One way we do that is by comparing our practices to our policies and internal guidance documents, and making sure that what we do lives up to what we say, including what’s in the Justice Manual. That Manual provides internal guidance to all federal prosecutors and gives outside parties detailed information about what to expect—though of course it does not create enforceable rights.

To be sure, over the past several years, most things have stayed the same. But no organization can continue to succeed in a changing world by remaining static. So we are always looking for ways to make our work even more effective and to make sure we are living up to our obligations in the best way we can.

Please indulge me for a minute as I repeat something I said in my first public remarks back in June 2018, which set the tone for the past few years. “The Antitrust Division has its own important policies, procedures, and institutional practices—but it is not an isolated agency acting alone. It operates within the larger institution of the U.S. Department of Justice, and is guided by . . . Department-wide policies.”

That’s far from a radical statement, but it is critically important to our enforcement, and it is is a unifying principle for the work we’ve done since then. Over the past several years, a common theme has been to ensure our practice, which remains tailored to address difficult-to-detect antitrust crimes, is in line with Department-wide policies. This even-handed approach increases predictability and transparency and ensures our decisions are principled and neutral—critical features of any well-functioning law enforcement body.

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II. Practice

With that framework in mind, I’ll now turn to some of our recent policy and practice updates and place them in context.

A. Compliance

An appropriate place to begin is compliance, where the Division made a significant policy change in recent years. That policy change is a good example of my focus on ensuring that we are taking a consistent approach—including with the rest of the Department—while also adapting our policies and practices to reflect the realities of a changing world. It’s also an important reminder that by incentivizing good corporate citizenship, we can stop crime before it starts.

As you are undoubtedly aware if you follow developments in criminal antitrust enforcement, in 2019 the Division revised its approach to evaluating corporate compliance programs. And consistent with our commitment to a process-driven, transparent approach, we immediately enshrined that change in the Justice Manual.

As a result, we now consider crediting compliance programs when making charging decisions the same way the rest of the Department does. The Division previously reasoned that if a company committed an antitrust crime, its compliance program clearly failed. The Division also took the view that the prospect of leniency was incentive enough for a company to invest in compliance, and further
that we risked weakening that incentive if we credited compliance programs when deciding what charges were appropriate for companies that did not qualify for leniency.

But experience and common sense tell us that antitrust crimes might sometimes occur even when a company makes real efforts to implement a compliance program. We’ve recently also seen that crediting forward-looking compliance commitments at the sentencing phase can incentivize investments in compliance. We took the time to hear and learn from members of the bar and business community in a public roundtable. And we have learned from other components’ practices, including the Criminal Division’s experience with its FCPA Corporate Enforcement Policy, which creates similar incentives to self-report. Based on all of those experiences, we concluded that adapting our approach would best serve our enforcement goals.

Earlier I mentioned that the Division’s criminal enforcement mission is deterring, detecting, and prosecuting antitrust crimes. While we often talk about those three in the same breath, it’s worth taking a minute to reflect on their proper priority. It’s simple: The most important is deterrence. True success would prevent all antitrust crimes and allow American markets to operate free from collusion, driving innovation, lower costs, and a higher standard of living.
As Ulysses S. Grant—whom we can thank for creating the Justice Department—once observed: “Although a solider by education and profession, I have never felt any sort of fondness for war, and I have never advocated it except as a means for peace.”\(^3\) We feel the same way about prosecuting criminals. We do it not simply to punish wrongdoers, but to deter crime.

That said, while effective compliance programs prevent crime, they also allow early detection if a violation nonetheless occurs. A company with a robust compliance program will be more easily able to identify the misconduct and bring it to our attention, including giving us the evidence we need to make determinations about its responsible individuals. That early detection and cooperation may very well allow the company to qualify for leniency. And even if it does not, under our policy—which is the policy across the entire Department—that company might still qualify for a deferred prosecution agreement rather than a guilty plea.

This structure enhances the incentives to self-report by seeking leniency. A deferred prosecution agreement is much closer to a guilty plea than leniency, which has unmatched benefits. Companies should understand that there’s no tactical advantage in deciding not to apply for leniency and instead holding out for

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a DPA; a company that makes that choice will most certainly not be eligible for anything short of a criminal conviction. We are willing to take the hypothetical risk that occasionally a company with an otherwise effective compliance program might be poorly counseled not to seek leniency. That is at most a minor cost, which is well worth incurring for the immense benefit of investments in antitrust compliance, which should mean that companies and their employees commit fewer crimes in the first place.

B. Deferred Prosecution Agreements

Outside of the compliance context, over the past several years we have worked to ensure that our approach to corporate resolutions is consistent with Department policy, including the Justice Manual’s Federal Principles of Prosecution of Business Organizations. Those Principles enumerate a common list of factors that all prosecutors weigh when deciding whether to bring corporate charges and what the appropriate mechanism is for a company that seeks to resolve its liability.

Given the nature of corporate antitrust crimes, in our run-of-the-mill case, the Principles typically lead us to conclude that an indictment or guilty plea is the appropriate path forward. A comprehensive review of our record over the past several years bears this out: Since FY2018, we have indicted 15 companies and 30 have entered into guilty pleas. But in some instances, a careful, fact-specific
analysis under those Principles has led the Division to enter into deferred prosecution agreements resolving antitrust charges.

The Justice Manual acknowledges the Division’s “firm policy” that leniency is available to only the first corporation that makes full disclosure of its role in a criminal antitrust conspiracy to the government. As the Justice Manual recognizes, that policy is tailored to the specific challenges of destabilizing and uncovering antitrust conspiracies. But outside of that well-understood policy, the Justice Manual does not absolve the Antitrust Division’s prosecutors from administering individualized justice. Indeed, it requires them to make a fact-specific assessment in each case and consider the full range of resolution mechanisms available across the Department.

In the early days of the leniency policy, it was, of course, not as established as it is today. At the same time, our prosecutors relied more heavily on leniency as an investigative tool. That led Antitrust Division officials to observe that the Division “disfavors the use of . . . DPAs for antitrust crimes.”

But the landscape has changed over the years. The Division’s ability to investigate and prosecute without a leniency applicant has never been stronger, for myriad reasons including

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our ever-growing partnerships with law enforcement agencies and ever-increasing litigation readiness.

Especially in light of those changed circumstances, considering the full range of resolution mechanisms has complemented, rather than compromised, criminal antitrust enforcement. And a faithful reading of the Justice Manual—the most predictable, transparent, and fair approach—guides us to consider the Principles the way the rest of the Department does. The first of those Principles is the crime’s nature and seriousness. For antitrust crimes that go to the heart of a company’s business, this is a critical factor weighing in favor of criminal charges. But that is just the first of eleven factors. We also weigh considerations like the collateral consequences that a conviction would cause and the pervasiveness of the conduct within the company. As part of our commitment to transparency, when the Principles lead us to resolve a charge by DPA, the publicly filed agreement includes a section identifying the factors that weighed most heavily in our decision, given the individual facts and circumstances of that particular case.

By considering all of the Principles and making our analysis as transparent and predictable as possible, we also encourage companies to self-report. That incentive structure, including our leniency policy, works best when companies know the full range of available options. For instance, a company that is unsure whether it will ultimately qualify for leniency and faces truly ruinous collateral
consequences from a conviction may reasonably be more willing to come forward knowing that the Division will hear the company’s arguments, consider the Principles of Federal Prosecution of Business Organizations, and seek to avoid an outcome that would unduly harm innocent third parties.

The Division’s Criminal Program does not shy away from vigorous enforcement, even in heavily regulated industries or in atypical fact-specific situations where corporate criminal convictions will have truly unjust effects on innocent third parties. Even in those circumstances, we have not hesitated to indict companies that do not accept responsibility for their crimes. But for companies that choose to cooperate and admit wrongdoing, in certain circumstances a DPA may be the best way to allow us to restore integrity to the markets. Our prosecutors apply the analysis neutrally to companies of all shapes and sizes. It has sometimes led us to conclude that a DPA is appropriate for a significant player in the market, for instance where a company’s mandatory debarment would have considerable consequences for health care patients. And that neutral analysis has also led us to enter into DPAs with much smaller companies when their convictions would cause similar consequences.

When we follow Department policy, that leads to just outcomes for each defendant that appears before us. It guarantees that our enforcement promotes, rather than hinders, competition, including in critical sectors of the economy. And
by securing cooperation from corporate wrongdoers, we best position ourselves to prosecute the individuals responsible for corporate crime, as evidenced by our ongoing work in the health care space and recent cases in the financial industry.

C. Engagement with Targets on Charging Decisions

The Division takes process and transparency equally seriously when it comes to our interactions with targets and their defense counsel. Here again we follow the protocols in the Justice Manual, which apply to all Department prosecutors, and which our Division Manual echoes. These procedures guide how we decide whether to discuss prospective charging decisions with defense counsel, and how we decide when to inform targets of their status—which is often a precursor, and a necessary prerequisite, to discussions about charging decisions. Consistent with the principle of individualized justice, we apply that guidance based on the specific case and circumstances before us. The result of that process-driven approach is, of course, that we don’t come to the same outcome in every case: some situations warrant more engagement than others. Let me describe how this approach works in practice.

First, the Justice Manual outlines the analysis all prosecutors undertake when deciding whether to exercise their discretion to notify a subject when they
become a target.\textsuperscript{5} The Manual guides us to notify a target “in appropriate cases.” But it also provides a number of circumstances where notification is not appropriate. That includes “routine clear cases” and instances in which notifying a subject could compromise an ongoing investigation or cause undue delay.\textsuperscript{6}

Occasionally, we cannot delay our investigation for targets to be notified, and sometime situations arise where notification creates other risks we cannot bear. Otherwise, the Antitrust Division typically takes a generous approach, particularly when a subject and counsel have engaged productively and affirmatively with staff throughout the investigation.\textsuperscript{7} But this process is a two-way street. When a subject and counsel make clear they are not interested in meaningful, good-faith interactions—the kind that enhance the Division’s ability to reach a just result rather than serving as a distraction—the Division’s prosecutors are under no obligation to notify a target of its status.

As the Justice Manual further provides, “[i]n investigations handled by the Antitrust Division, a target’s counsel is usually afforded an opportunity to meet with staff and the office or section chief regarding the recommendation being

\textsuperscript{5} Justice Manual § 9-11.153; \textit{see id.} at § 7-3.400 (“The Antitrust Division follows the Department’s practice of informing individuals under certain circumstances that they are targets of the investigation.”).


\textsuperscript{7} \textsc{U.S. Dep’t of Justice, Antitrust Div., Antitrust Division Manual}, Ch. 3 § G.2.c (updated July 2019) (“Staff ordinarily will inform defense counsel that it is seriously considering recommending indictment.”).
considered.”

But that is far from absolute. If the target and counsel have declined to engage throughout the investigation, or made apparent to staff that further engagement will not be productive, then the Division will not continue to spend its valuable time and resources on pointless meetings—and if we have decided not to notify the target of its status, of course there will not be an opportunity for a meeting.

Absent such circumstances, the Division typically grants a request for a meeting with line prosecutors and their managers to argue against indictment “for factual, legal, or prosecutorial policy reasons.” When we follow that process, prosecutors and their direct supervisors—in other words, the people who know the most about the case and who will make charging recommendations to Division leadership—are best able to make “efficient[]” and “informed” assessments. That team then discusses counsel’s presentation with the Criminal Program’s leadership, and communicates any requests from defense counsel to meet with the Front Office. After discussing with the team, the Criminal Program’s leadership will take meetings at our discretion. While, as the Justice Manual describes, we “ordinarily” agree to a meeting, we are especially likely to do so if the case raises

8 Justice Manual § 7-3.400.
9 Id.
10 Id.
11 Id.
a significant issue with policy or legal implications. Regardless, rest assured that the team thoroughly evaluates defense counsel’s arguments and ensures they are considered by the Front Office, including the Assistant Attorney General—who is the final decisionmaker for Division charging decisions but takes meetings with a target’s counsel in “[o]nly very unusual circumstances.”

Following these procedures results in efficient, well-reasoned, and individualized outcomes. It inspires confidence that enforcement decisions are based on the merits and the merits alone, and dispels any perception of two systems of justice.

**D. Leniency**

You might have noticed that I haven’t said much today about the Division’s marquee enforcement tool, the leniency program. That’s certainly not because it’s not important—the leniency program remains one of our most powerful tools. It’s because that’s one area where we haven’t made significant changes. Not one word of the leniency policy has changed since the early 1990s. The policy is in many ways a model of the clear, transparent, predictable enforcement that I’ve been discussing today.

There’s no doubt why the leniency program has stood the test of time and readily withstands incremental changes in our practice and policy. At various

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12 *Id.*
times in recent years, a litany of developments has been predicted to precipitate leniency’s demise, but, from where I sit, none of these have hampered our enforcement efforts.

In fact, our enforcement is stronger now than ever before. Although our resources have steadily declined over the last decade, we have risen to the challenge by becoming more nimble and creative. A few instructive statistics: Last fiscal year we had the highest number of corporate fines and penalties in the past five years. We have the most grand jury investigations open in the last decade. And we have never been more able and willing to take cases to trial. We currently have 17 indicted cases across 14 different investigations, against 9 companies and 31 individuals—the largest number in the modern era of antitrust enforcement. That includes pending charges against eight current or former CEOs or company presidents, demonstrating our ongoing commitment to individual accountability at the highest levels.

Our talented prosecutors stand ready to litigate these cases. And I’m pleased to announce that they will be supported by two new Acting Co-Directors of Criminal Litigation: Brian Young (who is participating on the panel to follow) and Carol Sipperly. Both have spent significant time in other parts of the Justice Department and bring a wealth of litigation experience and unique perspectives to our teams.
III. Conclusion

I will close by emphasizing what the recent executive order made clear: Fair and vigorous antitrust enforcement is crucial to protecting economic liberty and “providing an environment conducive to the preservation of our democratic political and social institutions.”¹³

Our Criminal Program is on the frontlines of that mission. To translate it into action requires us to enforce the law zealously and apply Department policy faithfully.

On his first day, Attorney General Garland reaffirmed the central norm that fuels that work across the Department: the principle of equal, individualized justice. As the Attorney General put it, we do not have “[o]ne rule for friends and another for foes” or “[o]ne rule for the powerful and another for the powerless.”¹⁴ We have one justice system equally available to all.

The process-driven approach I have described today ensures that we live up to that ideal. And it gives us the best chance at making our enforcement so effective that someday antitrust prosecutions will be nothing but a distant memory.

DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE

Working Party No. 3 on Co-operation and Enforcement

Competition Compliance Programmes – Note by BIAC

8 June 2021

This document reproduces a written contribution from Business at OECD (BIAC) submitted for Item 1 of the 133rd OECD Working Party 3 meeting on 8 June 2021.

More documents related to this discussion can be found at http://www.oecd.org/daf/competition/competition-compliance-programmes.htm.

Please contact Ms Sabine ZIGELSKI if you have any questions about this document [Email: Sabine.Zigelski@oecd.org].

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Business at OECD (BIAC)

1. Business at OECD (BIAC) appreciates the opportunity to submit these comments to the OECD in connection with the OECD’s Roundtable on competition compliance programmes.

1. Introduction

2. Competition compliance programmes have been discussed by the OECD Competition Committee in the past. BIAC presented a comprehensive analysis of the subject for the June 2011 roundtable.\(^1\) This submission builds on the points made in that document.

3. While the remarks made then are still valid, the present discussion is most timely, as the world has moved on significantly in the intervening period since the last roundtable on this topic. Over the past decade, compliance programmes have become more sophisticated and costly. They have had to evolve to cater for the proliferation of compliance requirements in other areas (anti-bribery and corruption, as well as trade, tax evasion, data protection and privacy compliance requirements, to name but a few), in addition to the often-heightened expectations of compliance programmes that come in their wake. Increasingly, antitrust authorities have introduced guidance for compliance programmes as well as policies that recognise robust corporate compliance programmes in calculating the fine or even at the charging stage.\(^2\) BIAC is keen to ensure that we collectively continue to build on that momentum.

4. Section II of this paper considers the shared objectives of the antitrust community, encompassing both enforcers and business, to promote robust corporate compliance programmes. Sections III to VI then articulate four key ways in which antitrust agencies, and others, can assist with compliance efforts, by creating a climate that supports antitrust compliance programmes, before some concluding remarks in section VII.

2. A Common Cause

5. As former EU Commissioner Joaquín Almunia correctly observed once, the purpose of antitrust enforcement is not, in and of itself, to impose high fines and other penalties. Rather, the ultimate policy goal of antitrust enforcement is to have no need to impose penalties at all.\(^3\) Thus, the focus of antitrust enforcement agencies should focus

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on the key questions: “How can antitrust violations be prevented most effectively? How can companies be encouraged and incentivised to comply?”

6. While monetary sanctions for violations, high costs of litigation and legal defence, and reputational damage due to a finding of infringement create a real incentive for genuine compliance efforts, most companies inherently want to conduct their businesses ethically, with integrity and in compliance with the law. For this reason, the main role of compliance programmes—both antitrust compliance and compliance in many other areas of law—is to instil a culture of doing business ethically and in compliance with all applicable laws. Compliance programmes empower management and employees within the company by enabling them to have a greater knowledge and understanding of the laws applying to them.

7. A second key role is to facilitate the early detection of misconduct (ideally even before the misconduct occurs) thus allowing for termination of such conduct and the prevention of the negative consequences associated with non-compliance both for the company and for the market as a whole. A well-designed antitrust compliance programme should enable a company to avoid violations or—in the unfortunate circumstance that a violation does occur—detect it swiftly and terminate it appropriately, with a leniency application where applicable.

8. The old adage “prevention is better than the cure” holds true in this regard. It is this very notion that binds the antitrust community together in a shared objective, a common cause. Competition authorities have every interest in promoting a climate where robust compliance is perceived, simply, as the right thing to do. Such a climate will allow for a multiplier effect, bearing in mind that the effects of a single company’s compliance efforts are not necessarily or exclusively limited to its behaviour—as it interacts with other third parties, whether as customer, supplier, joint venture partner, fellow trade association member or in other multiple forms, the seeds of robust compliance are spread. The more efforts companies invest in robust compliance programmes, the more likely we are to see a compliance climate that benefits society as a whole.

9. Many of the remarks made in this paper arise out of discussions in multiple legal and business fora. One of these, the In-House Competition Lawyers Association (ICLA), whose membership comprises more than 450 members across Europe, recently (in 2020) carried out a comprehensive survey of the activities of in-house lawyers in relation to compliance. We include a summary of the key results of the survey in an annex to this paper. Whilst only a snapshot, the survey results demonstrate a concerted effort by business to promote compliance (including focused recruitment into legal and compliance teams, particularly of antitrust specialists; senior management endorsement; tailored training; regular risk assessments and compliance audits), although clearly improvements can and should always be pursued.

10. While agency enforcement has an important role to play, experience shows that antitrust enforcement based on deterrence and punishment alone has not been successful in stamping out unacceptable anticompetitive behaviour. This is because no compliance programme, however well designed, maintained and enforced, can stop all possible infringements. Sometimes infringements of the law will occur. This is true beyond antitrust law—in every aspect of life. Unfortunately, even “good” people break the law—often unintentionally, especially in the area of antitrust law, which often requires

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specific expertise and careful nuance. However, despite the best, more robust and most sincere compliance programmes, there can be bad faith stakeholders who knowingly violate the law.

11. Can, and should, competition agencies—and others—do more to promote compliance, beyond brandishing the enforcement “stick?” BIAC believes this is definitely the case and invites competition authorities across the world to work with business in pursuit of that common cause, along four broad themes: (i) enhancing the standing of in-house lawyers; (ii) creating better incentives for compliance efforts; (iii) increasing agency compliance guidance and advocacy efforts; and (iv) improving legal certainty on substantive issues. We believe collaboration on these work streams with corporate compliance policy makers outside the competition arena would be helpful.

3. Enhancing the Standing of In-House Lawyers

12. Whilst compliance culture is a matter for everyone within a business, with a clear “tone from the top,” there can be little doubt of the essential role played by in-house lawyers in any business organisation, including specialist antitrust experts who are, as noted, increasingly recruited into in-house roles. The role of in-house lawyers is to assist with an understanding of the law and to propagate compliance best practice. This is achieved by designing and implementing a compliance programme through guidelines, internal policies, training, and the spreading of awareness regarding competition law. They also update internal stakeholders on competition law and policy developments at home and abroad.

13. In-house legal teams therefore form the backbone of compliance efforts within organisations. In many ways, they are “allies” to competition enforcers. At the end of the day, their job is the same—to do their best to prevent antitrust violations.

14. In addition, in-house counsel address questions and requests raised by the business, reviewing business proposals, proactively counselling on competition implications, and ensuring that the business operates within the boundaries of the law. Their role is, amongst other things, to protect the company from antitrust risk—first and foremost they translate and explain complex legal concepts and principles in language that the business can understand. They are often the first—and only—port of call for the business when new initiatives, relationships or strategies are being considered. The higher costs of outside counsel, as compared to those of in-house counsel, lead companies to utilise them sparingly, if at all.

15. In-house counsel rely on having the trust and respect of the business, a “standing” that allows them to advise on the most complex and sensitive of matters whilst being perceived as the final voice on issues of compliance. This is severely undermined in those jurisdictions that do not recognise legal privilege for in-house counsel. For example, the European Courts in Luxembourg have stated that they do not consider in-house lawyers to be independent from their employers and—as a consequence—their advice cannot be privileged.

16. This position seriously hampers compliance efforts. In many ways, in-house counsel can—and do—regularly and promptly act to prevent or avert potential violations that external counsel (or agencies) may have no idea are about to take place. It also fosters a candid relationship between the in-house counsel and the business teams, which increases detection, prevention and mitigation. In other words, in-house counsel is best placed to “nip things in the bud.” Denying legal privilege to in-house lawyers is an impediment to effective compliance programmes, given the primary role of in-house
lawyers in driving such programmes. Businesspeople need to be able to rely on their in-house lawyers’ advice, and they should not be discouraged from consulting internal lawyers; they also need to respect their views and not be encouraged to doubt or second-guess the advice internal lawyers provide.

17. BIAC strongly urges moves to enhance the standing of in-house counsel, including through recognition of the legally privileged status of their advice, as a central plank of improving compliance more widely.

4. Creating Better Incentives For Compliance Efforts

18. BIAC notes, from experience, that building, implementing, maintaining and continuously improving an effective antitrust law compliance programme across any organisation, regardless of its size, is a costly and complex task. Hence, the effort required for such programmes should not be underestimated either by the companies—or by the authorities.⁵

19. In an ideal world, companies’ C-suite executives would all be antitrust lawyers with a good understanding of the importance of antitrust compliance. Regrettably, that is not the case in reality. As a result, in-house antitrust lawyers face great difficulties in convincing leadership to allocate adequate resources and headcount for antitrust compliance. This is especially the case where a company has never been caught in an antitrust violation, which makes it hard for leadership to fully appreciate the need to invest resources in antitrust compliance.

20. A key development in recent years has been the consideration of genuine and robust antitrust compliance programmes as a mitigating factor in the sanctioning and/or the charging stage after a violation has been uncovered. A growing number of jurisdictions now take the existence of a robust compliance programme into consideration when assessing violations.

21. In the U.S., the existence of a robust compliance programme (i.e., a program that detects, addresses and mitigates antitrust issues), as well as early cooperation with a cartel investigation, have long been associated with recommended reductions in penalties.⁶ In 2019, the Department of Justice (DOJ) Antitrust Division announced a broader policy that takes antitrust compliance programmes into account already at the charging stage, i.e., in considering whether to file criminal antitrust charges against a company.⁷ These guidelines are complimentary to a similar set of DOJ guidelines

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⁵ This is before we factor in the next likely wave of revolutionary change in the compliance field—the fulsome and meaningful deployment of technology to assist with and enable compliance practices.


relating more broadly to corporate compliance programmes. The 2019 U.S. antitrust compliance guidelines are a welcome development and bring the Antitrust Division’s practice more in line with the rest of the DOJ prosecutors and indeed closer to other antitrust agencies.

22. An alternative, or complement, to “compliance credits,” applied only after a violation has been detected, could be a system of tax credits that recognises investment in compliance programmes as a business expense, thus effectively lowering the cost to companies. We appreciate that this may pose a number of logistical challenges, but it could have a number of advantages, namely: (i) it could be more “holistic,” encouraging compliance initiatives across areas beyond simply antitrust; (ii) it could help SMEs, which may be particularly challenged in terms of resources, by setting a ceiling or cap on the credit, so that they benefit more than larger companies; and (iii) the tax benefit could be denied to/recouped from companies that have been found to have infringed the law, thus eliminating the benefit for companies whose compliance programmes have supposedly “failed.”

23. BIAC believes credit for compliance programmes, both before or after a violation has been detected, is also beneficial in non-criminal antitrust violations (such as in civil or administrative enforcement regimes). In fact, one may argue that it would be even easier to give credit to compliance programmes in such regimes because there could be no question of such credit interfering with prosecutorial discretion or the powers of criminal courts.

24. Such credit follows the example of the anti-bribery and anti-corruption enforcement agencies. It is clear that incentivising genuine compliance efforts results in more investment in compliance, and therefore greater efforts towards compliance. In the ICLA survey mentioned above, a majority of respondents (69%) did not expect their

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antitrust compliance budgets to change materially, but 82% of in-house respondents believed that if having an actively implemented formal compliance programme increased the likelihood of a reduced sanction from authorities for non-compliance, higher investments would be made.

25. The recognition that many antitrust agencies give to robust compliance programmes is therefore welcomed by the business community. Regrettably, some authorities still consider that if a violation of the law has occurred, the compliance programme has “failed” and therefore a discount would not be appropriate.\textsuperscript{11} Since companies must comply with the law and that role is fulfilled by a compliance programme, so the argument goes, that should be a sufficient incentive.

26. Companies establish and maintain compliance programmes (for antitrust, but also in many other areas of law) to conduct business ethically and with integrity and to comply with the law. While competition lawyers might view compliance with competition as key, businesses in all sectors nowadays have to comply with a large set of rules in different areas of the law, each of them with their own compliance pressures and priorities. BIAC firmly believes that giving appropriate recognition to good efforts will encourage greater investment, more dedicated resources, and further efforts to enhance real compliance efforts in practice. Many in-house lawyers, the backbone of compliance efforts, argue from experience that taking into account a compliance programme for the purpose of a fine would allow them to show why the business should invest in the programme and resist budget limitations.

27. Greater soft convergence between antitrust authorities around guidance that considers compliance programmes during the charging or sentencing stage would be helpful, because the more jurisdictions that are willing to consider credit for compliance programmes, the easier it is for antitrust counsel to obtain the needed resources for more robust compliance programmes and the more efforts will be put in place to encourage compliance in practice.

5. Increasing Agency Compliance Guidance and Advocacy Efforts

28. In addition to the recognition of compliance programmes during the sentencing or charging stage, and financial incentives for compliance programmes, agency guidance, covering both criminal and civil enforcement, for robust compliance programmes is another valuable tool assisting in-house counsel to persuade C-suite leadership of the importance of robust compliance programmes and how such programmes should be tailored. This is because the enforcement agencies’ imprimatur over such a guidance document greatly amplifies the message.

29. Such guidance has often been developed by competition agencies in the context of moves to provide compliance credit, as highlighted above. One line of argument that has been deployed against granting compliance credit is that if a competition authority were to consider the existence of a compliance programme as a mitigating factor, companies might set up “sham” compliance programmes just to take advantage of the possibility of a discount. Another argument has been that competition agencies are ill-equipped to “assess” the robustness or adequacy of compliance programmes (it being

\textsuperscript{11} As recently articulated by Olivier Guersent, Director General DG COMP, at the Concurrences Fireside Chat: Why Antitrust Compliance? Competition Agencies' Points of View, on January 12, 2021.
easier to conclude that a compliance programme is a failure as soon as any infringement occurs).

30. The experience of the last decade has demonstrated that these arguments are, at best, short-sighted, and at worst, entirely misguided. Companies do not invest in sham programmes—in antitrust or in other areas of law. The real question is whether the programme is sufficiently robust, whether adequate resources have been provided internally and how the compliance programme is perceived within the company.

31. In many areas of compliance, bolstered by increasing requirements of corporate social responsibility that mandate compliance with laws and encourage ethical corporate behaviour, enforcers appear to have had no problem assuming the role of assessing the effectiveness/adequacy of programmes and have produced extensive guidance on best practice. And the more agencies get involved in assessing and evaluating compliance programmes, the more they will improve.

32. We are all familiar with the key elements of a compliance programme:

- Tone from the top: sincere commitment and active involvement of senior management, which leads to a culture of compliance across the company.
- Risk based assessment (focus of the programme on the key risks of that company in that industry).
- Having corporate compliance policies and procedures as well as guidance and training tailored to the business.
- Controls to verify that the process is working well including internal reporting and allowing employee to seek advice when needed.
- Constant monitoring and improvements in line with internal expertise or changes in the law.
- The possibility of sanctions for individuals (such as dismissal).

33. The International Chamber of Commerce (ICC) has created excellent documents, including a toolkit, highlighting the key elements of a compliance programme and how to design and implement them. Many antitrust authorities have recognised the efforts of the ICC, and given helpful guidance to assist companies. The Canadian Competition Bureau’s Bulletin on (antitrust) compliance is one of the few publications from a national competition authority that includes information that companies can use to assess the credibility and robustness of compliance programme. A compliance programme will be considered credible when the company can demonstrate that it was reasonably designed, implemented, and enforced in the circumstances.

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12 See U.S. DOJ, supra note 7; see also UK Ministry of Justice, The Bribery Act 2010 Guidance about procedures which relevant commercial organisations can put into place to prevent persons associated with them from bribing (Mar. 2011), available at http://www.justice.gov.uk/downloads/legislation/bribery-act-2010-guidance.pdf (includes six principles that should inform an assessment of whether “adequate procedures” have been put in place).


34. As the Canadian Competition Bureau states in its guidance, a credible corporate compliance programme has three broad benefits for businesses:

- It signals an entity’s efforts in tackling and addressing seriously the legal obligations and ethical considerations facing businesses today;
- It reduces costs of compliance by helping to clarify, for business managers and officers, the boundaries of permissible conduct as well as situations that could put their business at risk of violating the act; and
- Should there be any violation of (Canadian) competition law, it provides a possibility of the business to mitigate the cost of non-compliance.\footnote{15}

35. Given its clout and the convergence synergies, BIAC strongly urges the OECD to work with BIAC members and draft and develop broad multilateral compliance programme guidance. Since competition compliance is part of broader compliance themes, the competition committee may want to collaborate with the OECD Anti-Corruption Division in this regard.

36. BIAC also commends any and all initiatives that competition agencies engage in, beyond guidance on robust compliance programmes, to advocate and explain the importance of competition, especially where it involves clear and practical explanations aimed directly at business and at society at large. The more the benefits of competition are embedded within the moral fabric of society generally, the easier it will be for businesses to instil a compliance culture within their organisations.

6. Improving Legal Certainty on Substantive Issues

37. Good compliance is predicated on a good understanding of the law, which in turn requires clarity and certainty from the enforcers. For companies to comply with competition law and for compliance programmes to fulfil their roles, the rules must be clear and comprehensible. Lack of clarity will lead to companies either not taking legitimate and lawful business decisions (thus having a “chilling effect” on what would otherwise be fair competition on the merits) or else acting in good faith, but at the risk of engaging in conduct that is later deemed to be an infringement.

38. BIAC believes this requires a three-pronged commitment from antitrust agencies:

- A clear commitment to publication of fully-reasoned enforcement decisions.\footnote{16} We note, in this regard, a clear trend in some jurisdictions towards dispensing with many cases on the basis of shortened and expedited procedures (e.g. settlements) or negotiated outcomes (e.g. commitment or remedy cases). Whilst there may be very good reasons (not least of which for the party(ies) under investigation) for expedited processes to be deployed, such procedures tend to culminate in less than fulsome and clear decisions. This is particularly worrying in respect of novel theories of harm, where industry as a whole would benefit from the detail and nuances of the arguments. It is also detrimental to compliance efforts generally if enforcement is expedited to such an extent.

\footnote{15} Id., at Preface.

\footnote{16} Clearly allowing for redaction of confidential information.
(where it becomes the norm, rather than the exception) that legal developments become opaque and the result of compromises thrashed out behind closed doors.

- Clear and user-friendly guidelines on the interpretation of the law, focused on the practical impact on business practices and suitably updated to reflect market changes and legal developments. Such guidelines often follow a track record of enforcement experience, a compendium of practices of sorts, but need not be limited to such situations. Every now and again, antitrust agencies will be called upon to become "thought leaders" (without the luxury of a well-established precedent base) on novel issues or approaches that require urgent guidance. In light of the COVID-19 pandemic, we have seen prompt reactions and effective guidance being developed and published in short spaces of time by a number of agencies. It can be done. One such area calling for urgent leadership and guidance from the antitrust agencies is that of the pursuit of climate and sustainability objectives through competitor collaborations. If there is one area where we cannot, collectively, wait for good precedent cases to be decided, it is in respect of the climate emergency.

- A systematic effort of reinforcing the key messages of the law and significant enforcement activities, not only through symposia and legal conferences, but also articulated in clear and practical language directly to the business community and society at large, as indicated above.

7. Conclusion

39. Enforcement agencies and in-house lawyers share an interest in ensuring compliance with competition law. Robust competition compliance programmes are key

17 Guidelines should ideally translate legal principles into practical commercial scenarios, ideally using case studies to illustrate the impact of the rules. They should also avoid guidance that is so heavily caveat-ed, or subject to so many conditions, that it is rendered meaningless in any realistic practical scenario.

18 The current and on-going consultations being conducted by DG COMP in respect of the updates to its legislation and guidelines on both vertical and horizontal agreements are good illustrations of a conscientious and broad-based approach to guidance setting. Where businesses have been involved in the detail of the policy discussions and decisions, they are far more likely to be able to translate the law into practical and effective internal guidelines for the company's compliance programme.

19 There are many areas of competition law where compliance principles are not necessarily clear-cut. For example, in respect of the exchange of competitively sensitive information in entirely legitimate situations (e.g. M&A deals) or in respect of information flows between customers and suppliers.

20 To an extent, competition agencies have also readily accepted the mantle of thought leaders in respect of digital markets, where they are developing or contributing to proposed legislation, guidance and policy initiatives almost in tandem with their enforcement activities.

for preventing and ceasing competition violations. Due to their high costs, and the fact that C-suite executives typically lack a full understanding of competition law, it is difficult for in-house lawyers to obtain sufficient resources needed for robust compliance programmes. Hence, policies that support their efforts to fund and design robust competition compliance programmes are key. These can and should include credit for compliance programmes at the charging and/or sentencing stage.

40. Genuine efforts by companies to promote compliance should be acknowledged as far as possible. Authorities should also acknowledge that, to assist companies in their compliance efforts, far more helpful (“user friendly”) guidance, on both robust compliance programmes and on the substance of the law, is required. At the end of the day, both companies and agencies seek the same goal: to try to ensure there are no infringements. Both companies and agencies have a duty to do whatever they reasonably can to achieve this goal for the benefit of society.

41. The OECD can be hugely beneficial in developing policies and guidance that nurture and promote competition compliance programmes.
Annex A.

Date of the Questionnaire: November 2020

Who Responded to the Questionnaire

- 102 responses (95 complete responses)
- 60% from Antitrust in-house lawyers
- 60% belong to companies with over 50,000 employees
- 66% have worldwide operations
- 44% have 21-100 lawyers in the legal teams in Europe
- 44% have more than 10 members in their compliance teams in Europe
- 53% have 1-5 full time Antitrust lawyers

Antitrust Compliance Policy & Antitrust Compliance Programme

- 65% stated they have a general Compliance Policy
- 80% reported to have both an Antitrust Policy and an Antitrust Compliance Programme
- Of the 20% that do not have an Antitrust Policy and/or Programme, 6% do have other forms of documents such as code of conduct and ad-hoc guidelines
- The vast majority of respondents reported that their Antitrust Compliance Policy / Programme is run centrally (86%). Around 20% reported they also have regional and/or local Antitrust Compliance Policy / Programmes.

Implementation of the Policy / Programme

- 53% reported 1-5 lawyers are in charge of the implementation of the Antitrust Compliance Policy / Programme
- 19% reported having 6-15 lawyers
- 18% reported having 16-50 lawyers
- 11% reported having more than 50 lawyers
- In relation to who holds the ultimate responsibility for implementation, 56% reported the legal department, 12% reported the Compliance department, 11% reported the CEO, and 9% the Board. 13% reported to have other functions holding the ultimate responsibility such as the Chief Risk and Compliance Officer and the Business
Review of the Policy / Programme: 63% reported that the Antitrust Compliance Policy / Programme is reviewed at least annually with the others reporting a variety of frequency ranging between a continuous review approach to a review every three years.

Antitrust Compliance Policy & Antitrust Compliance Programme – Best Practices

- Communication:
  - 92% reported they make the Antitrust Compliance Policy / Programmes available via the internal website and internal training.
  - 21% reported having a Compliance app
  - Other forms of communication included Compliance ambassadors, FAQs, open door policy of Antitrust lawyers, internal communications programme, letters of undertakings.
  - 48% reported that senior management communicates its support to the Antitrust Compliance Policy / Programme to staff at least annually. 31% reported other, which included more often than on a yearly basis, CEO intro-video ahead of face-to-face trainings, quarterly compliance town halls, in every CEO communication to staff, in connection with the launch of code of conducts, policies etc.

- Incentives for Compliance:
  - 77% consequences on employment
    - 25% responsible business unit has to bear legal costs of non-compliance
    - 23% impact on performance / bonus
    - 19% annual appraisal
    - 5% reported other, such as badges in the HR reward system

- Whistleblowing:
  - 93% reported having whistleblowing hotlines with a slight majority being internal only

Training

- Frequency
  - 54% reported they do training at least yearly
  - 53% reported they do training upon joining of all new employees
  - 46% reported a combination of frequencies using a risk based approach

- Delivery
  - 90% have e-learning capabilities
  - 73% do face-to-face in small groups (up to 20 people)
  - 57% do face-to-face in large groups (more than 20 people)
  - 44% hold video conferences
  - 75% reported that training is delivered by dedicated Antitrust in-house lawyers
45% reported that training is delivered by a general in-house lawyer
20% reported that training is delivered by a compliance officer
16% reported that training is delivered by external counsel

93% uses tailor made trainings
83% reported that the Antitrust Compliance module is delivered as a standalone training

Audience
82% reported they use a risk-based approach
49% reported actively training senior management
Others responded that their approach includes everyone (30%), train the trainer sessions for the legal team (33%), the Board / Executive team (28%), salesforce was noted as being specifically targeted

Records
90% reported tracking attendance systematically / partially.

Test
81% stated they test the knowledge of the training.
44% stated that there are consequences for staff who fail the test, notably repetition of module until successfully passed.

Risk & Audit

Risk
92% reported conducting Antitrust Compliance risk assessments of which:
- 57% are on an ad hoc basis and
- 21% at least annually
- 14% with a frequency ranging from quarterly to every three years

Audit
86% confirmed that they perform proactive audits of which:
- 35% on an occasional basis
- 32% linked to a specific issue
- 20% on a regular basis
- Topics covered by audit include amongst others: compliance with policies, training completion, business activities, interaction with competitors, vertical and horizontal relationships, strategic alliances, marketing and sales activities, M&A, R&D, pricing, exclusive agreements, loyalty programmes, email / WhatsApp behaviour, procurement, use of advanced analytics / big data, industry association membership, awareness
Other Interesting Outcomes

- 69% of respondents stated that the General Counsel reports to the CEO.
- It was noted that certain companies have a specific Antitrust Compliance department.
- 69% of respondents do not foresee any changes to their Antitrust Compliance budget, compared to 19% which expect an increase and 12% to decrease (snapshot in July 2020).
- 82% of respondents believe that if having an actively implemented formal Compliance Programme increased the likelihood of a reduced sanction from authorities for non-compliance, higher investments would be made.
- 74% of respondents have reported that certain controls are in place in relation to contacts with competitors.
- 85% of respondents confirmed having Antitrust Compliance related clauses in their contracts with suppliers, contractors etc.
- Compared to the last survey, there was a higher percentage of time spent on civil litigation related to Antitrust.
Evaluation of Corporate Compliance Programs in Criminal Antitrust Investigations

July 2019
Introduction

Antitrust compliance programs promote vigorous competition in a free market economy by creating a culture of good corporate citizenship within a company that seeks to prevent antitrust violations. Although an antitrust compliance program may not prevent every violation, an effective compliance program should be able to detect and address potential antitrust violations. Moreover, effective antitrust compliance programs not only prevent, detect, and address antitrust violations, they also further remedial efforts and help foster corporate and individual accountability by facilitating a corporation’s prompt self-reporting and timely and thorough cooperation in the Antitrust Division’s investigations. Indeed, a truly effective antitrust compliance program gives a company the best chance to obtain the significant benefits available under the Division’s Corporate Leniency program.

This guidance document focuses on the evaluation of compliance programs in the context of criminal violations of the Sherman Act such as price fixing, bid rigging, and market allocation. It is intended to assist Division prosecutors in their evaluation of antitrust compliance programs at the charging and sentencing phases of an investigation. Although the evaluation of antitrust compliance programs is an important factor in the prosecutorial decision-making process at both charging and sentencing, a number of other important factors not addressed by this compliance-specific guidance also must be considered.

This document is based on the Division’s experience and expertise evaluating antitrust compliance programs, along with resources within the Department of Justice concerning the evaluation of corporate compliance programs, including the Justice Manual, see, e.g., JM § 9-28.800, and Criminal Division Guidance on the Evaluation of Corporate Compliance Programs. It offers the views of the Antitrust Division of the Department of Justice and has no force or effect of law. It is not intended to be, and may not be, relied upon to create any rights, substantive or procedural, enforceable at law by any party. Nothing in this document should be construed as mandating a particular outcome in any specific case, and nothing in this document limits the discretion of the U.S. Department of Justice or any U.S. government agency to take any action, or not to take action, with respect to matters under its jurisdiction.


I. Evaluating a Corporate Antitrust Compliance Program at the Charging Stage

When deciding whether and to what extent to bring criminal charges against a corporation, Division prosecutors must consider the Principles of Federal Prosecution and the Principles of Federal Prosecution of Business Organizations (collectively hereinafter referred to as “Principles”) and the Division’s Leniency Policy. See JM §§ 9-27.001, et seq.; 9-28.300–2 8.400. Under the Principles, prosecutors consider a number of factors, including “the adequacy and effectiveness of the corporation’s compliance program at the time of the offense, as well as at the time of the charging decision.” JM § 9-28.800.

Although the Department has no formulaic requirements regarding the evaluation of corporate compliance programs, the Justice Manual asks prosecutors to consider three “fundamental” questions in their evaluation:

1. “Is the corporation’s compliance program well designed?”
2. “Is the program being applied earnestly and in good faith?”
3. “Does the corporation’s compliance program work?”

This document addresses these questions in the criminal antitrust context by identifying elements of an effective antitrust compliance program. Although Division prosecutors should consider these factors when evaluating antitrust compliance programs, the factors are not a checklist or formula. Indeed, not all factors will be relevant in every case, and some factors in the Division’s analysis are relevant to more than one question. Moreover, the Division recognizes that a company’s size affects the resources allocated to antitrust compliance and the breadth of the company’s compliance program. Division prosecutors should evaluate compliance

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4 A more detailed discussion of the Division’s approach to charging can be found in Chapter Three of the Antitrust Division Manual, https://www.justice.gov/atr/file/761141/download.

5 See U.S.S.G. § 8B2.1 note 2(C) (“The formality and scope of actions that an organization shall take to [implement an effective compliance program] . . . including the necessary features of the organization’s standards and procedures, depend on the size of the organization. . . . A large organization generally shall devote more formal operations and greater resources . . . than shall a small organization. . . . [A] small organization may [rely on] . . . less formality and fewer resources.”).
programs throughout the course of their investigation, including asking relevant compliance-related questions of witnesses, and should not wait for companies to offer a compliance presentation before beginning their evaluation of a company’s antitrust compliance program.

A. **Preliminary Questions**

At the outset of any inquiry into the efficacy of an antitrust compliance program, Division prosecutors should ask three preliminary questions about a company’s compliance efforts:

1) Does the company’s compliance program address and prohibit criminal antitrust violations?
2) Did the antitrust compliance program detect and facilitate prompt reporting of the violation?
3) To what extent was a company’s senior management involved in the violation?

These questions are intended to help Division prosecutors focus the analysis discussed below on the factors most relevant to the specific circumstances under review.

B. **Elements of an Effective Compliance Program**

The goal of an effective antitrust compliance program is to prevent and detect violations. While the best outcome is to prevent antitrust violations from occurring, the Division recognizes that “no compliance program can ever prevent all criminal activity by a corporation’s employees.” JM § 9-28.800. According to the Justice Manual, the “critical factors in evaluating any program are whether the program is adequately designed for maximum effectiveness in preventing and detecting wrongdoing by employees and whether corporate management is enforcing the program or is tacitly encouraging or pressuring employees to engage in misconduct.” Id. Indeed, “[t]he keys for successful [antitrust] compliance [programs] in general are efficiency, leadership, training, education, information and due diligence.”

The factors that Division prosecutors should consider when evaluating the effectiveness of an antitrust compliance program include: (1) the design and comprehensiveness of the program; (2) the culture of compliance within the company; (3) responsibility for, and resources dedicated to, antitrust compliance; (4) antitrust risk assessment techniques; (5) compliance training and communication to employees; (6) monitoring and auditing techniques, including

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continued review, evaluation, and revision of the antitrust compliance program; (7) reporting mechanisms; (8) compliance incentives and discipline; and (9) remediation methods. Questions relevant to each of these considerations are set forth below.

1. **Design and Comprehensiveness**

   Although a Code of Conduct can be an effective tool for communicating a company’s antitrust-related policies and procedures, the Justice Manual also requires prosecutors to evaluate whether a compliance program “is merely a ‘paper program’ or whether it was designed, implemented, reviewed, and revised, as appropriate, in an effective manner.” JM § 9-28.800. Division prosecutors should consider the design, format, and comprehensiveness of the antitrust compliance program. With respect to this analysis, key considerations are the adequacy of the program’s integration into the company’s business and the accessibility of antitrust compliance resources to employees and agents (hereinafter “employees and agents” will be collectively referred to as “employees”).

   - Before becoming aware of any investigation, did the company have an antitrust compliance program establishing standards and procedures to prevent and detect criminal conduct? When was the company’s antitrust compliance program first implemented? How often is it updated? Is it periodically reviewed and does it seek feedback from employees? Are compliance materials updated with recent developments and periodically refreshed so they do not become stale?

   - What is the format of the antitrust compliance program? Is it in writing?

   - Who is responsible for integrating antitrust policies and procedures into the company’s business practices? In what specific ways are antitrust compliance policies and procedures reinforced through the company’s internal controls? For example, does the company have a way of tracking business contacts with competitors or attendance at trade association meetings, trade shows, and other meetings attended by competitors? Is that tracking system regularly monitored?

   - What guidance has been provided to employees who could flag potential antitrust violations (e.g., those with approval authority for pricing changes and participation in industry meetings, certification responsibilities for bidding activity, or human

resources/hiring authority)? Do they know what antitrust risks the company faces and what conduct potentially indicates an antitrust violation?

☐ What guidance has been provided to employees about document destruction and obstruction of justice? Does the company have clear document retention guidelines and does it educate employees on the ramifications of document destruction and obstruction of justice?

2. Culture of Compliance

An effective compliance program will “promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.” U.S.S.G. § 8B2.1(a). Support of the program from the company’s top management is critical to the success of an antitrust compliance program. The Division has recognized that “[i]f senior management does not actively support and cultivate a culture of compliance, a company will have a paper compliance program, not an effective one.”8 Indeed, employees should be “convinced of the corporation’s commitment to [the compliance program].” JM § 9-28.800.

Division prosecutors should examine the extent to which corporate management has clearly articulated — and conducted themselves in accordance with — the company’s commitment to good corporate citizenship.9

☐ What is the company’s senior leadership doing to convey the importance of antitrust compliance to company employees? How have senior leaders, through their words and actions, encouraged (or discouraged) antitrust compliance? What concrete actions have they taken to demonstrate leadership in the company’s antitrust compliance or remediation efforts if relevant?


9 See U.S.S.G. § 8B2.1(b)(2)(A)–(B) (the company’s “governing authority shall be knowledgeable about the content and operation of the compliance and ethics program and shall exercise reasonable oversight” of it; “[h]igh-level personnel . . . shall ensure that the organization has an effective compliance and ethics program.”).
Have senior managers tolerated antitrust violations in pursuit of new business, greater revenues, or maintaining customers? Were senior managers involved in the violation(s)?

Has there been personal accountability by senior leadership for failures in the company’s antitrust compliance?

What else is the company’s senior leadership doing to set the tone from the top or bring about culture change throughout the company?

3. **Responsibility for the Compliance Program**

For the antitrust compliance program to be effective, those with operational responsibility for the program must have sufficient autonomy, authority, and seniority within the company’s governance structure, as well as adequate resources for training, monitoring, auditing and periodic evaluation of the program. See U.S.S.G. § 8B2.1(b)(2)(C) (“To carry out such operational responsibility, such individual(s) shall be given adequate resources, appropriate authority, and direct access to the governing authority or an appropriate subgroup of the governing authority.”)

Who has overall responsibility for the antitrust compliance program? Is there a chief compliance officer or executive within the company responsible for antitrust compliance? If so, to whom does the individual report, e.g., the Board of Directors, audit committee, or other governing body? How often does the compliance officer or executive meet with the Board, audit committee, or other governing body? How does the company ensure the independence of its compliance personnel?

How does the compliance function compare with other functions in the company in terms of stature, compensation levels, rank/title, reporting line, resources, and access to key decision-makers? Is the compliance function sufficiently senior within the organization to command respect and adequate resources?

Are compliance personnel dedicated to compliance responsibilities, or do they have other, non-compliance responsibilities within the company? If so, what proportion of their time is dedicated to compliance responsibilities? Why has the company chosen the compliance structure it has in place? Has the company’s size impacted that decision?

Who is delegated day-to-day operational responsibility for the antitrust compliance program? Do compliance personnel responsible for antitrust compliance have adequate experience and familiarity with antitrust law? Has the level of experience and qualifications in these roles changed over time?

Does the company allocate sufficient compliance resources to educating employees on antitrust law? Are such resources allocated efficiently by focusing on high antitrust risk areas? For example, does the compliance program identify and adequately train employees who have frequent contact with competitors?

Who reviews the effectiveness of the compliance function and what is the review process?

4. Risk Assessment

A well-designed corporate compliance program is “designed to detect the particular types of misconduct most likely to occur in a particular corporation’s line of business.” JM § 9-28.800. Thus, an effective antitrust compliance program should be appropriately tailored to account for antitrust risk.10

Is the company’s antitrust compliance program tailored to the company’s various industries/business lines and consistent with industry best practice? Does the compliance program provide specialized antitrust compliance training for human resources personnel and executives responsible for overseeing recruitment and hiring? What efforts has the company made to implement antitrust-related policies and procedures that reflect and address the antitrust risks it faces, including legal and technical changes in the way the company conducts business? For example, as employees utilize new methods of electronic communication, what is the company doing to evaluate and manage the antitrust risk associated with these new forms of communication?

What information or metrics has the company collected and used to help detect antitrust violations? How has the information or metrics informed the company’s

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10 See U.S.S.G. § 8B2.1, application note 7 (“If, because of the nature of an organization’s business, there is a substantial risk that certain types of criminal conduct may occur, the organization shall take reasonable steps to prevent and detect that type of criminal conduct. For example, an organization that, due to the nature of its business, employs sales personnel who have flexibility to set prices shall establish standards and procedures designed to prevent and detect price-fixing.”)
antitrust compliance program, *e.g.*, through training, modifications, or internal controls? For example, if the company bids on contracts, is bid information subject to evaluation to detect possible bid-rigging? Does the company evaluate pricing changes for possible price-f杏ing?

☐ Is the company’s antitrust risk assessment current and subject to periodic review? Have there been any updates to antitrust policies and procedures in light of lessons learned or marketplace, legal, technological, or other developments? Do these updates account for risks discovered through prior antitrust violations or compliance incidents?

5. **Training and Communication**

An effective antitrust compliance program will include adequate training and communication so that employees understand their antitrust compliance obligations. “Ideally, [antitrust compliance training] empowers employees to do business confidently insofar as they are clearer on what is and is not permissible, and can resist pressures more effectively (whether these are internal or external).” ¹¹ For example, training can teach relevant personnel that competitor communications could signal an antitrust violation if they are not part of a legitimate joint venture or other procompetitive or competitively neutral collaboration. In addition, training should instruct employees involved in such collaboration that a legitimate collaboration between competitors can become problematic if it develops into an exchange of competitively sensitive business information or future pricing information, or if other antitrust violations occur. Training should address what to do when an employee thinks activity is potentially unlawful.

☐ How has the company communicated its antitrust policies and procedures to all employees? Did the company introduce antitrust policies in a way that promotes and ensures employees’ understanding? In what specific ways are antitrust compliance policies and procedures reinforced through the company’s internal controls?

☐ If the company has a Code of Conduct, are antitrust policies and principles included in the document? If the company has foreign subsidiaries, are there cultural, linguistic, or other barriers to implementing the company’s antitrust compliance polices, and how are those barriers addressed?

☐ What mechanisms does the company have in place to ensure that employees follow its compliance program? See U.S.S.G. § 8B2.1(b)(5)(A). How is the compliance program distributed to employees? Are the compliance program and related training

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¹¹ ICC Compliance Toolkit at 12.
materials easily accessible to employees, *e.g.*, via a prominent location on the company’s intranet?

- Must employees certify that they have read the compliance policy? If so, how? Do the certification policies apply to all employees? Do they apply to members of the Board of Directors? How often must employees certify their antitrust compliance?

- Does the company provide antitrust compliance training? In what form is the antitrust training and who provides it? Is the training provided online or in-person (or both), and what is the company’s rationale for its choice?

- Who receives antitrust compliance training? What analysis has the company undertaken to determine whom to train and to tailor training to the company’s lines of business and antitrust risks?

- Does training include senior management/supervisors and the Board of Directors? What is the lowest level employee who must receive antitrust compliance training? Are contractors or agents included in the training?

- How often does antitrust compliance training occur? Is antitrust compliance training required when an employee begins work? Is antitrust compliance training required prior to attendance at trade shows or trade association or other meetings with competitors? Are employees required to certify their completion of the training program? See U.S.S.G. § 8B2.1(b)(4). If so, how? How is attendance at the training recorded and preserved? Who ensures that employees attended the required training and certified their attendance?

- How does the training test the level of employees’ understanding of the antitrust laws? Is training tailored to the employee’s duties and does it provide examples that could arise in the business unit he or she is a part of? For example, if the company bids on contracts, does the company’s compliance program educate employees on bid rigging and market allocation? Are those with pricing authority educated about price fixing?

- How often is antitrust training updated to reflect marketplace, legal, technological, or other developments? Has the training addressed lessons learned from prior antitrust violations or compliance incidents?
U.S. Department of Justice
Antitrust Division
Evaluation of Corporate Compliance Programs in Criminal Antitrust Investigations
(July 2019)

6. Periodic Review, Monitoring and Auditing

A critical part of an effective antitrust compliance program is the effort to review the compliance program and ensure that it continues to address the company’s antitrust risks. See U.S.S.G. § 8B2.1(b)(5). An effective compliance program includes monitoring and auditing functions to ensure that employees follow the compliance program. See U.S.S.G. § 8B2.1(b)(5)(A).12 “Periodically assessing whether parts of [a] company’s business or certain business practices are complying with antitrust laws in practice allows senior managers to know whether the company is moving closer to its antitrust compliance objectives.”13 Such periodic testing also “helps ensure that there is continued, clear and unambiguous commitment to antitrust compliance from the top down, that the antitrust risks identified or the assessment of these risks have not changed (or if they have changed, to reassess controls) and that the risk mitigation activities/controls remain appropriate and effective.”14 Review also may help “identify substantive antitrust concerns, rectify any illegal [behavior], and to assess if it is appropriate to apply to one or more antitrust agency for [leniency].”15

☐ What methods does the company use to evaluate the effectiveness of its antitrust compliance program? Who evaluates the antitrust compliance program? For example, is there a compliance committee that meets periodically? How often is the program evaluated? See U.S.S.G. § 8B2.1(b)(5)(B). Has the company revised its compliance program in light of any prior antitrust violations or compliance incidents?

☐ What monitoring or auditing mechanisms does the company have in place to detect antitrust violations? See U.S.S.G. § 8B2.1(b)(5)(A). For example, are there routine or unannounced audits (e.g., a periodic review of documents/communications from specific employees; performance evaluations and employee self-assessments for specific employees; interviews of specific employees)? Does the company use any type of screen, communications monitoring tool, or statistical testing designed to identify potential antitrust violations?

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12 See also ICC COMPLIANCE TOOLKIT at 65-70.

13 ICC COMPLIANCE TOOLKIT at 68.

14 Id.

15 Id.
7. Reporting

An effective compliance program includes reporting mechanisms that employees can use to report potential antitrust violations anonymously or confidentially and without fear of retaliation. Confidential reporting mechanisms can facilitate the company’s detection of an antitrust violation and are an integral element of an effective compliance program.\(^\text{16}\)

- Is there a publicized system in place whereby employees may report or seek guidance about potentially illegal conduct? Are there positive or negative incentives for reporting antitrust violations?
- Do supervisors or employees who become aware of a potential antitrust violation have a duty to report it to those with responsibility for compliance? What disciplinary measures does the company have for those who fail to report such conduct?
- Does the company periodically analyze reports or investigation findings for patterns or other red flags of a potential antitrust violation?

8. Incentives and Discipline

Also relevant to an antitrust compliance program’s effectiveness are the “systems of incentives and discipline [] that ensure the compliance program is well-integrated into the company’s operations and workforce.”\(^\text{17}\)

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\(^{16}\) See JM § 9-28.900 (requiring prosecutors to evaluate whether the company has “established an information and reporting system in the organization reasonably designed to provide management and directors with timely and accurate information sufficient to allow them to reach an informed decision regarding the organization’s compliance with the law.”).

\(^{17}\) Criminal Division Compliance Guidance, at 2.
What incentives does the company provide to promote performance in accordance with the compliance program? See U.S.S.G. § 8B2.1(b)(6)(A).

Has the company considered the implications on antitrust compliance of its incentives, compensation structure, and rewards? Does the company incentivize antitrust compliance? Have there been specific examples of actions taken (e.g., promotions or awards denied, or bonuses clawed back) because of compliance considerations? Who determines the compensation, including bonuses, as well as discipline and promotion of compliance personnel?

What disciplinary measures does the company have for those who engage in antitrust violations or those who fail to take reasonable steps to prevent or detect violations? See U.S.S.G. § 8B2.1(b)(6)(B).

Has the company disciplined anyone because of an antitrust violation? Has there been any management turnover because of the company’s participation in the violation? Were the actual reasons for discipline communicated to employees? If not, why not?

Are antitrust violations disciplined in the same manner as other types of misconduct? Can the company provide examples or data on this point?

What is the employment status of culpable executives who have not cooperated and accepted responsibility for antitrust violations? If the company still employs culpable executives, what are their positions? What role do they have with regard to pricing, the company’s compliance and internal investigation, and supervision of any potential witnesses in the government’s investigation?

9. Remediation and Role of the Compliance Program in the Discovery of the Violation

Although a compliance program may not detect every antitrust violation in the first instance, remedial efforts and improvements to the company’s compliance program may prevent recurrence of an antitrust violation. The Justice Manual directs prosecutors to consider “any remedial actions taken by the corporation, including . . . revisions to corporate compliance programs in light of lessons learned.” JM § 9-28.800. The thoroughness of the company’s remedial efforts is relevant to whether the antitrust compliance program was effective at the time of the antitrust violation.

Remedial efforts are also relevant to whether the compliance program was effective at the time of a charging decision or sentencing recommendation. Therefore, Division prosecutors
should assess whether and how the company conducted a comprehensive review of its compliance training, monitoring, auditing, and risk control functions following the antitrust violation. Division prosecutors should also consider what modifications and revisions the company has implemented to help prevent similar violations from reoccurring, and what methods the company will use to evaluate the effectiveness of its antitrust compliance program going forward.

In addition, early detection and self-policing are hallmarks of an effective compliance program and frequently will enable a company to be the first applicant for leniency under the Division’s Corporate Leniency Policy. Early detection and self-policing are also relevant at the charging stage of an investigation. As articulated in the Justice Manual, “the Department encourages such corporate self-policing, including voluntary disclosures to the government of any problems that a corporation discovers on its own.” JM § 9-28.800; see JM § 9-28.900. “If a compliance program did effectively identify misconduct, including allowing for timely remediation and self-reporting, a prosecutor should view the occurrence as a strong indicator that the compliance program was working effectively.”

- What role did the antitrust compliance program play in uncovering the antitrust violation?
- Did anyone who had responsibility to report misconduct to the compliance group/office know of the antitrust violation? If so, when was the violation discovered, by whom, and how was it uncovered? If not, why not?
- Has the company conducted an analysis to detect why the antitrust compliance program failed to detect the antitrust violation earlier?
- Has the company revised its antitrust compliance program as a result of the antitrust violation and lessons learned? How did the company address, and determine how to address, failures in the compliance program? Was outside counsel or an advisor involved?
- What role did the senior leadership play in addressing the antitrust violation and revising the compliance program to better detect the conduct that resulted in the antitrust violation?
- Does the company believe that changes to the antitrust compliance program will prevent the recurrence of an antitrust violation? What modifications and revisions

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18 CRIMINAL DIVISION COMPLIANCE GUIDANCE, at 13.
did the company make? How will the company evaluate the continued effectiveness of its antitrust compliance training?

☐ How did the company convey the changes to antitrust policies and procedures to employees? Were employees required to certify they understood the new policies?

☐ Does the antitrust compliance program provide guidance on how to respond to a government investigation? Does the program educate employees on the ramifications of document destruction and obstruction of justice?

☐ Did the compliance program assist the company in promptly reporting the illegal conduct? Did the company report the antitrust violation to the government before learning of a government investigation? How long after becoming aware of the conduct did the company report it to the government?

II. Sentencing Considerations

In accordance with the U.S. Sentencing Guidelines and 18 U.S.C. § 3572, when a decision is made to charge a company, Division prosecutors should evaluate whether to recommend a sentencing reduction based on a company’s effective antitrust compliance program.

A. Guidelines Credit for an Effective Compliance Program

The Sentencing Guidelines provide several avenues for a company to receive credit for an effective compliance program. U.S.S.G. § 8C2.5(f) provides for a three-point reduction in a corporate defendant’s culpability score if the company has an “effective” compliance program. The existence and effectiveness of a compliance program also may be relevant to determining whether a company should be sentenced to probation pursuant to U.S.S.G. § 8D1.1. In addition, a compliance program may be relevant to determining the appropriate corporate fine to recommend within the Guidelines range or whether to recommend a fine below the Guidelines range. See U.S.S.G. § 8C2.8; 18 U.S.C. § 3572. The Sentencing Guidelines’ criteria are minimum requirements. As explained above, the Department has no formulaic requirements regarding corporate compliance programs. Compliance programs are to be evaluated on a case-by-case basis and will depend on the company’s specific compliance program and its implementation and operation.

The Sentencing Guidelines are clear that a sentencing reduction for an effective compliance program does not apply in cases in which there has been an unreasonable delay in reporting the illegal conduct to the government. See U.S.S.G. § 8C2.5(f)(2). In addition, there is a rebuttable presumption that a compliance program is not effective when certain “high-level personnel” or “substantial authority personnel” “participated in, condoned, or [were] willfully
ignorant of the offense.” U.S.S.G. § 8C2.5(f)(3)(A)–(C). Under the Sentencing Guidelines, “high-level personnel” and “substantial authority personnel” include individuals in charge of sales units, plant managers, sales managers, or those who have the authority to negotiate or set prices or negotiate or approve significant contracts. U.S.S.G. § 8A1.2, application note 3(B)–(C).

Division prosecutors should consider whether the Guidelines’ presumption that a compliance program is not effective applies and, if it does, whether the presumption can be rebutted under U.S.S.G. § 8C2.5 (f)(3)(C)(i)–(iv). Relevant to this inquiry is whether: (i) individuals with operational responsibility for the compliance program had direct reporting obligations to the governing authority of the company (e.g., an audit committee of the Board of Directors if applicable); (ii) the compliance program detected the antitrust violation before discovery outside of the company or before such discovery was reasonably likely; (iii) the company promptly reported the violation to the Antitrust Division; and, (iv) no individual with operational responsibility for the compliance program “participated in, condoned, or was willfully ignorant” of the antitrust violation. U.S.S.G. § 8C2.5.

Division prosecutors must assess application of the rebuttable presumption on a case-by-case basis. For antitrust violations, whether and when the company applied for a leniency marker under the Division’s Corporate Leniency Policy often will be a key factor in assessing whether or not the presumption can be rebutted.

B. **Compliance Considerations Relevant to Recommending Probation under U.S.S.G. § 8D1.1**

In each criminal case in which a company will be sentenced, Division prosecutors must also recommend whether a corporate defendant be placed on probation pursuant to U.S.S.G. § 8D1.1. The Division generally will not seek corporate probation for corporations that cooperate with the investigation and accept responsibility, except in limited circumstances, such as when a company has left culpable individuals in positions of authority, or has received a “Penalty Plus” fine adjustment for failing to report other cartel conduct at the time of a prior plea. In contrast, when a company is found guilty at trial, the Division may seek probation if the company does not accept responsibility and declines to take measures to implement or improve its antitrust compliance program. See, e.g., U.S.S.G. § 8D1.1(a)(3).

If a company did not have a pre-existing antitrust compliance program at the time of the antitrust violation, Division prosecutors should inquire whether the company has put in place a compliance program that meets the requirements of an effective compliance program under U.S.S.G. § 8B2.1. If the company has not established an adequate compliance program, the Division may recommend probation and, in appropriate cases, periodic compliance reports as a condition of probation. The Division also will consider whether an external monitor is necessary to ensure implementation of a compliance program and timely reports. Moreover, if the Division
C. **Statutory Fine Reduction for Recurrence Prevention Efforts**

In addition to the Sentencing Guidelines, Title 18 of the United States Code also provides a mechanism for recognizing remedial efforts and reducing a corporation’s fine. In determining whether to impose a fine, and the amount and timing of that fine, courts shall consider any measure taken by a company to discipline personnel responsible for the offense and to prevent recurrence of the offense. See 18 U.S.C. § 3572(a)(8). Division prosecutors thus should consider whether a company’s extraordinary post-violation compliance efforts warrant a fine reduction. A dedicated effort by the company’s senior management to change company culture after the antitrust violation and corporate actions to prevent the recurrence of an antitrust violation are relevant to whether staff should recommend such a fine reduction under 18 U.S.C. § 3572(a)(8). In making a recommendation for a fine reduction under 18 U.S.C. § 3572, Division prosecutors should consider:

- **Tone at the Top** – What steps has senior management taken to require and incentivize lawful behavior and participation in compliance training? Has the company demonstrated that ensuring future compliance and culture change is paramount? Has senior management accepted personal accountability for the violation (e.g., accepted a reduced bonus, included antitrust compliance in the company’s compliance program, actively participated in and encouraged antitrust-related training)? Did senior management participate in the revision and implementation of a more robust compliance program in response to the antitrust violation?

- **Improvements to Pre-Existing Compliance Program** – Has the company conducted a comprehensive review of its compliance, training, monitoring, auditing, and risk control functions following the antitrust violation? How did the company modify and revise its compliance program to prevent similar conduct from reoccurring? What methods will the company use to evaluate the effectiveness of its antitrust compliance training going forward?

- **Creation of Compliance Program** – If the company had no antitrust compliance program in place prior to the charged antitrust violation, did the company create a robust program tailored to the company’s business and aimed at preventing

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recurrence of an antitrust violation? Does the company’s new antitrust compliance program educate employees about the illegal conduct that occurred as well as other antitrust risks? Does the compliance program provide guidance on how to respond to a government investigation? What resources are devoted to antitrust compliance? Did the company hire outside counsel or an advisor to assist the company in creating the program? What methods will the company use to evaluate the effectiveness of its antitrust compliance program going forward?

- **Disciplinary Procedure** – Did the company have or create disciplinary procedures for employees who violate the law or the company’s compliance program? Did the company discipline employees who engaged in the violation?
Introduction

The “Principles of Federal Prosecution of Business Organizations” in the Justice Manual describe specific factors that prosecutors should consider in conducting an investigation of a corporation, determining whether to bring charges, and negotiating plea or other agreements. JM 9-28.300. These factors include “the adequacy and effectiveness of the corporation’s compliance program at the time of the offense, as well as at the time of a charging decision” and the corporation’s remedial efforts “to implement an adequate and effective corporate compliance program or to improve an existing one.” JM 9-28.300 (citing JM 9-28.800 and JM 9-28.1000). Additionally, the United States Sentencing Guidelines advise that consideration be given to whether the corporation had in place at the time of the misconduct an effective compliance program for purposes of calculating the appropriate organizational criminal fine. See U.S.S.G. §§ 8B2.1, 8C2.5(f), and 8C2.8(11). Moreover, the memorandum entitled “Selection of Monitors in Criminal Division Matters” issued by Assistant Attorney General Brian Benczkowski (hereafter, the “Benczkowski Memo”) instructs prosecutors to consider, at the time of the resolution, “whether the corporation has made significant investments in, and improvements to, its corporate compliance program and internal controls systems” and “whether remedial improvements to the compliance program and internal controls have been tested to demonstrate that they would prevent or detect similar misconduct in the future” to determine whether a monitor is appropriate.

This document is meant to assist prosecutors in making informed decisions as to whether, and to what extent, the corporation’s compliance program was effective at the time of the offense, and is effective at the time of a charging decision or resolution, for purposes of determining the appropriate (1) form of any resolution or prosecution; (2) monetary penalty, if any; and (3) compliance obligations contained in any corporate criminal resolution (e.g., monitorship or reporting obligations).

Because a corporate compliance program must be evaluated in the specific context of a criminal investigation, the Criminal Division does not use any rigid formula to assess the effectiveness of corporate compliance programs. We recognize that each company’s risk profile and solutions to reduce its risks warrant particularized evaluation. Accordingly, we make a reasonable, individualized determination in each case that considers various factors including, but not limited to, the company’s size, industry, geographic footprint, regulatory landscape, and other factors, both internal and external to the company’s operations, that might impact its compliance program. There are, however, common questions that we may ask in the course of making an individualized determination. As the Justice Manual notes, there are three “fundamental questions“ a prosecutor should ask:
1. “Is the corporation’s compliance program well designed?”
2. “Is the program being applied earnestly and in good faith?“ In other words, is the program adequately resourced and empowered to function effectively?
3. “Does the corporation’s compliance program work” in practice?

See JM 9-28.800.

In answering each of these three “fundamental questions,” prosecutors may evaluate the company’s performance on various topics that the Criminal Division has frequently found relevant in evaluating a corporate compliance program both at the time of the offense and at the time of the charging decision and resolution. The sample topics and questions below form neither a checklist nor a formula. In any particular case, the topics and questions set forth below may not all be relevant, and others may be more salient given the particular facts at issue and the circumstances of the company. Even though we have organized the topics under these three fundamental questions, we recognize that some topics necessarily fall under more than one category.

I. Is the Corporation’s Compliance Program Well Designed?

The “critical factors in evaluating any program are whether the program is adequately designed for maximum effectiveness in preventing and detecting wrongdoing by employees and whether corporate management is enforcing the program or is tacitly encouraging or pressuring employees to engage in misconduct.” JM 9-28.800.

Accordingly, prosecutors should examine “the comprehensiveness of the compliance program,” JM 9-28.800, ensuring that there is not only a clear message that misconduct is not tolerated, but also policies and procedures – from appropriate assignments of responsibility, to training programs, to systems of incentives and discipline – that ensure the compliance program is well-integrated into the company’s operations and workforce.

A. Risk Assessment

The starting point for a prosecutor’s evaluation of whether a company has a well-designed compliance program is to understand the company’s business from a commercial perspective, how the company has identified, assessed, and defined its risk profile, and the degree to which the program devotes appropriate scrutiny and resources to the spectrum of risks. In short, prosecutors should endeavor to understand why the company has chosen to set up the compliance program the way that it has, and why and how the company’s compliance program has evolved over time.
Prosecutors should consider whether the program is appropriately “designed to detect the particular types of misconduct most likely to occur in a particular corporation’s line of business” and “complex regulatory environment].” JM 9-28.800. For example, prosecutors should consider whether the company has analyzed and addressed the varying risks presented by, among other factors, the location of its operations, the industry sector, the competitiveness of the market, the regulatory landscape, potential clients and business partners, transactions with foreign governments, payments to foreign officials, use of third parties, gifts, travel, and entertainment expenses, and charitable and political donations.

Prosecutors should also consider “[t]he effectiveness of the company’s risk assessment and the manner in which the company’s compliance program has been tailored based on that risk assessment” and whether its criteria are “periodically updated.” See, e.g., JM 9-47-120(2)(c); U.S.S.G. § 8B2.1(c) (“the organization shall periodically assess the risk of criminal conduct and shall take appropriate steps to design, implement, or modify each requirement [of the compliance program] to reduce the risk of criminal conduct”).

Prosecutors may credit the quality and effectiveness of a risk-based compliance program that devotes appropriate attention and resources to high-risk transactions, even if it fails to prevent an infraction. Prosecutors should therefore consider, as an indicator of risk-tailoring, “revisions to corporate compliance programs in light of lessons learned.” JM 9-28.800.

- **Risk Management Process** – What methodology has the company used to identify, analyze, and address the particular risks it faces? What information or metrics has the company collected and used to help detect the type of misconduct in question? How have the information or metrics informed the company’s compliance program?

- **Risk-Tailored Resource Allocation** – Does the company devote a disproportionate amount of time to policing low-risk areas instead of high-risk areas, such as questionable payments to third-party consultants, suspicious trading activity, or excessive discounts to resellers and distributors? Does the company give greater scrutiny, as warranted, to high-risk transactions (for instance, a large-dollar contract with a government agency in a high-risk country) than more modest and routine hospitality and entertainment?

- **Updates and Revisions** – Is the risk assessment current and subject to periodic review? Is the periodic review limited to a “snapshot” in time or based upon continuous access to operational data and information across functions? Has the periodic review led to updates in policies, procedures, and controls? Do these updates account for risks discovered through misconduct or other problems with the compliance program?
Lessons Learned – Does the company have a process for tracking and incorporating into its periodic risk assessment lessons learned either from the company’s own prior issues or from those of other companies operating in the same industry and/or geographical region?

B. Policies and Procedures

Any well-designed compliance program entails policies and procedures that give both content and effect to ethical norms and that address and aim to reduce risks identified by the company as part of its risk assessment process. As a threshold matter, prosecutors should examine whether the company has a code of conduct that sets forth, among other things, the company’s commitment to full compliance with relevant Federal laws that is accessible and applicable to all company employees. As a corollary, prosecutors should also assess whether the company has established policies and procedures that incorporate the culture of compliance into its day-to-day operations.

Design – What is the company’s process for designing and implementing new policies and procedures and updating existing policies and procedures, and has that process changed over time? Who has been involved in the design of policies and procedures? Have business units been consulted prior to rolling them out?

Comprehensiveness – What efforts has the company made to monitor and implement policies and procedures that reflect and deal with the spectrum of risks it faces, including changes to the legal and regulatory landscape?

Accessibility – How has the company communicated its policies and procedures to all employees and relevant third parties? If the company has foreign subsidiaries, are there linguistic or other barriers to foreign employees’ access? Have the policies and procedures been published in a searchable format for easy reference? Does the company track access to various policies and procedures to understand what policies are attracting more attention from relevant employees?

Responsibility for Operational Integration – Who has been responsible for integrating policies and procedures? Have they been rolled out in a way that ensures employees’ understanding of the policies? In what specific ways are compliance policies and procedures reinforced through the company’s internal control systems?

Gatekeepers – What, if any, guidance and training has been provided to key gatekeepers in the control processes (e.g., those with approval authority or...
certification responsibilities)? Do they know what misconduct to look for? Do they know when and how to escalate concerns?

C. Training and Communications

Another hallmark of a well-designed compliance program is appropriately tailored training and communications.

Prosecutors should assess the steps taken by the company to ensure that policies and procedures have been integrated into the organization, including through periodic training and certification for all directors, officers, relevant employees, and, where appropriate, agents and business partners. Prosecutors should also assess whether the company has relayed information in a manner tailored to the audience’s size, sophistication, or subject matter expertise. Some companies, for instance, give employees practical advice or case studies to address real-life scenarios, and/or guidance on how to obtain ethics advice on a case-by-case basis as needs arise. Other companies have invested in shorter, more targeted training sessions to enable employees to timely identify and raise issues to appropriate compliance, internal audit, or other risk management functions. Prosecutors should also assess whether the training adequately covers prior compliance incidents and how the company measures the effectiveness of its training curriculum.

Prosecutors, in short, should examine whether the compliance program is being disseminated to, and understood by, employees in practice in order to decide whether the compliance program is “truly effective.” JM 9-28.800.

- **Risk-Based Training** – What training have employees in relevant control functions received? Has the company provided tailored training for high-risk and control employees, including training that addresses risks in the area where the misconduct occurred? Have supervisory employees received different or supplementary training? What analysis has the company undertaken to determine who should be trained and on what subjects?

- **Form/Content/Effectiveness of Training** – Has the training been offered in the form and language appropriate for the audience? Is the training provided online or in-person (or both), and what is the company’s rationale for its choice? Has the training addressed lessons learned from prior compliance incidents? Whether online or in-person, is there a process by which employees can ask questions arising out of the trainings? How has the company measured the effectiveness of the training? Have employees been tested on what they have learned? How has the company addressed
employees who fail all or a portion of the testing? Has the company evaluated the extent to which the training has an impact on employee behavior or operations?

☐ **Communications about Misconduct** – What has senior management done to let employees know the company’s position concerning misconduct? What communications have there been generally when an employee is terminated or otherwise disciplined for failure to comply with the company’s policies, procedures, and controls (e.g., anonymized descriptions of the type of misconduct that leads to discipline)?

☐ **Availability of Guidance** – What resources have been available to employees to provide guidance relating to compliance policies? How has the company assessed whether its employees know when to seek advice and whether they would be willing to do so?

**D. Confidential Reporting Structure and Investigation Process**

Another hallmark of a well-designed compliance program is the existence of an efficient and trusted mechanism by which employees can anonymously or confidentially report allegations of a breach of the company’s code of conduct, company policies, or suspected or actual misconduct. Prosecutors should assess whether the company’s complaint-handling process includes proactive measures to create a workplace atmosphere without fear of retaliation, appropriate processes for the submission of complaints, and processes to protect whistleblowers. Prosecutors should also assess the company’s processes for handling investigations of such complaints, including the routing of complaints to proper personnel, timely completion of thorough investigations, and appropriate follow-up and discipline.

Confidential reporting mechanisms are highly probative of whether a company has “established corporate governance mechanisms that can effectively detect and prevent misconduct.” JM 9-28.800; see also U.S.S.G. § 8B2.1(b)(5)(C) (an effectively working compliance program will have in place, and have publicized, “a system, which may include mechanisms that allow for anonymity or confidentiality, whereby the organization’s employees and agents may report or seek guidance regarding potential or actual criminal conduct without fear of retaliation”).

☐ **Effectiveness of the Reporting Mechanism** – Does the company have an anonymous reporting mechanism and, if not, why not? How is the reporting mechanism publicized to the company’s employees and other third parties? Has it been used? Does the company take measures to test whether employees are aware of the hotline and feel comfortable using it? How has the company assessed the seriousness of the
allegations it received? Has the compliance function had full access to reporting and investigative information?

- **Properly Scoped Investigations by Qualified Personnel** – How does the company determine which complaints or red flags merit further investigation? How does the company ensure that investigations are properly scoped? What steps does the company take to ensure investigations are independent, objective, appropriately conducted, and properly documented? How does the company determine who should conduct an investigation, and who makes that determination?

- **Investigation Response** – Does the company apply timing metrics to ensure responsiveness? Does the company have a process for monitoring the outcome of investigations and ensuring accountability for the response to any findings or recommendations?

- **Resources and Tracking of Results** – Are the reporting and investigating mechanisms sufficiently funded? How has the company collected, tracked, analyzed, and used information from its reporting mechanisms? Does the company periodically analyze the reports or investigation findings for patterns of misconduct or other red flags for compliance weaknesses? Does the company periodically test the effectiveness of the hotline, for example by tracking a report from start to finish?

### E. Third Party Management

A well-designed compliance program should apply risk-based due diligence to its third-party relationships. Although the need for, and degree of, appropriate due diligence may vary based on the size and nature of the company, transaction, and third party, prosecutors should assess the extent to which the company has an understanding of the qualifications and associations of third-party partners, including the agents, consultants, and distributors that are commonly used to conceal misconduct, such as the payment of bribes to foreign officials in international business transactions.

Prosecutors should also assess whether the company knows the business rationale for needing the third party in the transaction, and the risks posed by third-party partners, including the third-party partners’ reputations and relationships, if any, with foreign officials. For example, a prosecutor should analyze whether the company has ensured that contract terms with third parties specifically describe the services to be performed, that the third party is actually performing the work, and that its compensation is commensurate with the work being provided in that industry and geographical region. Prosecutors should further assess whether the
company engaged in ongoing monitoring of the third-party relationships, be it through updated
due diligence, training, audits, and/or annual compliance certifications by the third party.

In sum, a company’s third-party management practices are a factor that prosecutors
should assess to determine whether a compliance program is in fact able to “detect the particular
types of misconduct most likely to occur in a particular corporation’s line of business.” JM 9-
28.800.

- **Risk-Based and Integrated Processes** – How has the company’s third-party
  management process corresponded to the nature and level of the enterprise risk
  identified by the company? How has this process been integrated into the relevant
  procurement and vendor management processes?

- **Appropriate Controls** – How does the company ensure there is an appropriate
  business rationale for the use of third parties? If third parties were involved in the
  underlying misconduct, what was the business rationale for using those third parties?
  What mechanisms exist to ensure that the contract terms specifically describe the
  services to be performed, that the payment terms are appropriate, that the described
  contractual work is performed, and that compensation is commensurate with the
  services rendered?

- **Management of Relationships** – How has the company considered and analyzed the
  compensation and incentive structures for third parties against compliance risks?
  How does the company monitor its third parties? Does the company have audit rights
  to analyze the books and accounts of third parties, and has the company exercised
  those rights in the past? How does the company train its third party relationship
  managers about compliance risks and how to manage them? How does the company
  incentivize compliance and ethical behavior by third parties? Does the company
  engage in risk management of third parties throughout the lifespan of the
  relationship, or primarily during the onboarding process?

- **Real Actions and Consequences** – Does the company track red flags that are identified
  from due diligence of third parties and how those red flags are addressed? Does the
  company keep track of third parties that do not pass the company’s due diligence or
  that are terminated, and does the company take steps to ensure that those third
  parties are not hired or re-hired at a later date? If third parties were involved in the
  misconduct at issue in the investigation, were red flags identified from the due
diligence or after hiring the third party, and how were they resolved? Has a similar
third party been suspended, terminated, or audited as a result of compliance issues?
F. Mergers and Acquisitions (M&A)

A well-designed compliance program should include comprehensive due diligence of any acquisition targets, as well as a process for timely and orderly integration of the acquired entity into existing compliance program structures and internal controls. Pre-M&A due diligence, where possible, enables the acquiring company to evaluate more accurately each target’s value and negotiate for the costs of any corruption or misconduct to be borne by the target. Flawed or incomplete pre- or post-acquisition due diligence and integration can allow misconduct to continue at the target company, causing resulting harm to a business’s profitability and reputation and risking civil and criminal liability.

The extent to which a company subjects its acquisition targets to appropriate scrutiny is indicative of whether its compliance program is, as implemented, able to effectively enforce its internal controls and remediate misconduct at all levels of the organization.

- **Due Diligence Process** – Was the company able to complete pre-acquisition due diligence and, if not, why not? Was the misconduct or the risk of misconduct identified during due diligence? Who conducted the risk review for the acquired/merged entities and how was it done? What is the M&A due diligence process generally?

- **Integration in the M&A Process** – How has the compliance function been integrated into the merger, acquisition, and integration process?

- **Process Connecting Due Diligence to Implementation** – What has been the company’s process for tracking and remediating misconduct or misconduct risks identified during the due diligence process? What has been the company’s process for implementing compliance policies and procedures, and conducting post-acquisition audits, at newly acquired entities?

II. Is the Corporation’s Compliance Program Adequately Resourced and Empowered to Function Effectively?

Even a well-designed compliance program may be unsuccessful in practice if implementation is lax, under-resourced, or otherwise ineffective. Prosecutors are instructed to probe specifically whether a compliance program is a “paper program” or one “implemented, reviewed, and revised, as appropriate, in an effective manner.” JM 9-28.800. In addition, prosecutors should determine “whether the corporation has provided for a staff sufficient to audit, document, analyze, and utilize the results of the corporation’s compliance efforts.” JM 9-28.800. Prosecutors should also determine “whether the corporation’s employees are adequately informed about the compliance program and are convinced of the corporation’s
A. Commitment by Senior and Middle Management

Beyond compliance structures, policies, and procedures, it is important for a company to create and foster a culture of ethics and compliance with the law at all levels of the company. The effectiveness of a compliance program requires a high-level commitment by company leadership to implement a culture of compliance from the middle and the top.

The company’s top leaders—the board of directors and executives—set the tone for the rest of the company. Prosecutors should examine the extent to which senior management have clearly articulated the company’s ethical standards, conveyed and disseminated them in clear and unambiguous terms, and demonstrated rigorous adherence by example. Prosecutors should also examine how middle management, in turn, have reinforced those standards and encouraged employees to abide by them. See U.S.S.G. § 8B2.1(b)(2)(A)-(C) (the company’s “governing authority shall be knowledgeable about the content and operation of the compliance and ethics program and shall exercise reasonable oversight” of it; “[h]igh-level personnel … shall ensure that the organization has an effective compliance and ethics program” (emphasis added)).

Conduct at the Top — How have senior leaders, through their words and actions, encouraged or discouraged compliance, including the type of misconduct involved in the investigation? What concrete actions have they taken to demonstrate leadership in the company’s compliance and remediation efforts? How have they modelled proper behavior to subordinates? Have managers tolerated greater compliance risks in pursuit of new business or greater revenues? Have managers encouraged employees to act unethically to achieve a business objective, or impeded compliance personnel from effectively implementing their duties?

Shared Commitment — What actions have senior leaders and middle-management stakeholders (e.g., business and operational managers, finance, procurement, legal, human resources) taken to demonstrate their commitment to compliance or compliance personnel, including their remediation efforts? Have they persisted in that commitment in the face of competing interests or business objectives?

Oversight — What compliance expertise has been available on the board of directors? Have the board of directors and/or external auditors held executive or private sessions with the compliance and control functions? What types of information have
B. Autonomy and Resources

Effective implementation also requires those charged with a compliance program’s day-to-day oversight to act with adequate authority and stature. As a threshold matter, prosecutors should evaluate how the compliance program is structured. Additionally, prosecutors should address the sufficiency of the personnel and resources within the compliance function, in particular, whether those responsible for compliance have: (1) sufficient seniority within the organization; (2) sufficient resources, namely, staff to effectively undertake the requisite auditing, documentation, and analysis; and (3) sufficient autonomy from management, such as direct access to the board of directors or the board’s audit committee. The sufficiency of each factor, however, will depend on the size, structure, and risk profile of the particular company. “A large organization generally shall devote more formal operations and greater resources . . . than shall a small organization.” Commentary to U.S.S.G. § 8B2.1 note 2(C). By contrast, “a small organization may [rely on] less formality and fewer resources.” Id. Regardless, if a compliance program is to be truly effective, compliance personnel must be empowered within the company.

Prosecutors should evaluate whether “internal audit functions [are] conducted at a level sufficient to ensure their independence and accuracy,” as an indicator of whether compliance personnel are in fact empowered and positioned to “effectively detect and prevent misconduct.” JM 9-28.800. Prosecutors should also evaluate “[t]he resources the company has dedicated to compliance,” “[t]he quality and experience of the personnel involved in compliance, such that they can understand and identify the transactions and activities that pose a potential risk,” and “[t]he authority and independence of the compliance function and the availability of compliance expertise to the board.” JM 9-47.120(2)(c); see also JM 9-28.800 (instructing prosecutors to evaluate whether “the directors established an information and reporting system in the organization reasonably designed to provide management and directors with timely and accurate information sufficient to allow them to reach an informed decision regarding the organization's compliance with the law”); U.S.S.G. § 8B2.1(b)(2)(C) (those with “day-to-day operational responsibility” shall have “adequate resources, appropriate authority and direct access to the governing authority or an appropriate subgroup of the governing authority”).
they have other, non-compliance responsibilities within the company? Why has the company chosen the compliance structure it has in place? What are the reasons for the structural choices the company has made?

- **Seniority and Stature** – How does the compliance function compare with other strategic functions in the company in terms of stature, compensation levels, rank/title, reporting line, resources, and access to key decision-makers? What has been the turnover rate for compliance and relevant control function personnel? What role has compliance played in the company’s strategic and operational decisions? How has the company responded to specific instances where compliance raised concerns? Have there been transactions or deals that were stopped, modified, or further scrutinized as a result of compliance concerns?

- **Experience and Qualifications** – Do compliance and control personnel have the appropriate experience and qualifications for their roles and responsibilities? Has the level of experience and qualifications in these roles changed over time? How does the company invest in further training and development of the compliance and other control personnel? Who reviews the performance of the compliance function and what is the review process?

- **Funding and Resources** – Has there been sufficient staffing for compliance personnel to effectively audit, document, analyze, and act on the results of the compliance efforts? Has the company allocated sufficient funds for the same? Have there been times when requests for resources by compliance and control functions have been denied, and if so, on what grounds?

- **Data Resources and Access** – Do compliance and control personnel have sufficient direct or indirect access to relevant sources of data to allow for timely and effective monitoring and/or testing of policies, controls, and transactions? Do any impediments exist that limit access to relevant sources of data and, if so, what is the company doing to address the impediments?

- **Autonomy** – Do the compliance and relevant control functions have direct reporting lines to anyone on the board of directors and/or audit committee? How often do they meet with directors? Are members of the senior management present for these meetings? How does the company ensure the independence of the compliance and control personnel?
Outsourced Compliance Functions – Has the company outsourced all or parts of its compliance functions to an external firm or consultant? If so, why, and who is responsible for overseeing or liaising with the external firm or consultant? What level of access does the external firm or consultant have to company information? How has the effectiveness of the outsourced process been assessed?

C. Incentives and Disciplinary Measures

Another hallmark of effective implementation of a compliance program is the establishment of incentives for compliance and disincentives for non-compliance. Prosecutors should assess whether the company has clear disciplinary procedures in place, enforces them consistently across the organization, and ensures that the procedures are commensurate with the violations. Prosecutors should also assess the extent to which the company’s communications convey to its employees that unethical conduct will not be tolerated and will bring swift consequences, regardless of the position or title of the employee who engages in the conduct. See U.S.S.G. § 8B2.1(b)(5)(C) (“the organization’s compliance program shall be promoted and enforced consistently throughout the organization through (A) appropriate incentives to perform in accordance with the compliance and ethics program; and (B) appropriate disciplinary measures for engaging in criminal conduct and for failing to take reasonable steps to prevent or detect criminal conduct”).

By way of example, some companies have found that publicizing disciplinary actions internally, where appropriate and possible, can have valuable deterrent effects. At the same time, some companies have also found that providing positive incentives – personnel promotions, rewards, and bonuses for improving and developing a compliance program or demonstrating ethical leadership – have driven compliance. Some companies have even made compliance a significant metric for management bonuses and/or have made working on compliance a means of career advancement.

Human Resources Process – Who participates in making disciplinary decisions, including for the type of misconduct at issue? Is the same process followed for each instance of misconduct, and if not, why? Are the actual reasons for discipline communicated to employees? If not, why not? Are there legal or investigation-related reasons for restricting information, or have pre-textual reasons been provided to protect the company from whistleblowing or outside scrutiny?

Consistent Application – Have disciplinary actions and incentives been fairly and consistently applied across the organization? Does the compliance function monitor its investigations and resulting discipline to ensure consistency? Are there similar instances of misconduct that were treated disparately, and if so, why?
Incentive System – Has the company considered the implications of its incentives and rewards on compliance? How does the company incentivize compliance and ethical behavior? Have there been specific examples of actions taken (e.g., promotions or awards denied) as a result of compliance and ethics considerations? Who determines the compensation, including bonuses, as well as discipline and promotion of compliance personnel?

III. Does the Corporation’s Compliance Program Work in Practice?

The Principles of Federal Prosecution of Business Organizations require prosecutors to assess “the adequacy and effectiveness of the corporation’s compliance program at the time of the offense, as well as at the time of a charging decision.” JM 9-28.300. Due to the backward-looking nature of the first inquiry, one of the most difficult questions prosecutors must answer in evaluating a compliance program following misconduct is whether the program was working effectively at the time of the offense, especially where the misconduct was not immediately detected.

In answering this question, it is important to note that the existence of misconduct does not, by itself, mean that a compliance program did not work or was ineffective at the time of the offense. See U.S.S.G. § 8B2.1(a) (“[t]he failure to prevent or detect the instant offense does not mean that the program is not generally effective in preventing and deterring misconduct”). Indeed, “[t]he Department recognizes that no compliance program can ever prevent all criminal activity by a corporation’s employees.” JM 9-28.800. Of course, if a compliance program did effectively identify misconduct, including allowing for timely remediation and self-reporting, a prosecutor should view the occurrence as a strong indicator that the compliance program was working effectively.

In assessing whether a company’s compliance program was effective at the time of the misconduct, prosecutors should consider whether and how the misconduct was detected, what investigation resources were in place to investigate suspected misconduct, and the nature and thoroughness of the company’s remedial efforts.

To determine whether a company’s compliance program is working effectively at the time of a charging decision or resolution, prosecutors should consider whether the program evolved over time to address existing and changing compliance risks. Prosecutors should also consider whether the company undertook an adequate and honest root cause analysis to understand both what contributed to the misconduct and the degree of remediation needed to prevent similar events in the future.
For example, prosecutors should consider, among other factors, “whether the corporation has made significant investments in, and improvements to, its corporate compliance program and internal controls systems” and “whether remedial improvements to the compliance program and internal controls have been tested to demonstrate that they would prevent or detect similar misconduct in the future.” Benczkowski Memo at 2 (observing that “[w]here a corporation’s compliance program and controls are demonstrated to be effective and appropriately resourced at the time of resolution, a monitor will not likely be necessary”).

A. Continuous Improvement, Periodic Testing, and Review

One hallmark of an effective compliance program is its capacity to improve and evolve. The actual implementation of controls in practice will necessarily reveal areas of risk and potential adjustment. A company’s business changes over time, as do the environments in which it operates, the nature of its customers, the laws that govern its actions, and the applicable industry standards. Accordingly, prosecutors should consider whether the company has engaged in meaningful efforts to review its compliance program and ensure that it is not stale. Some companies survey employees to gauge the compliance culture and evaluate the strength of controls, and/or conduct periodic audits to ensure that controls are functioning well, though the nature and frequency of evaluations may depend on the company’s size and complexity.

Prosecutors may reward efforts to promote improvement and sustainability. In evaluating whether a particular compliance program works in practice, prosecutors should consider “revisions to corporate compliance programs in light of lessons learned.” JM 9-28.800; see also JM 9-47-120(2)(c) (looking to “[t]he auditing of the compliance program to assure its effectiveness”). Prosecutors should likewise look to whether a company has taken “reasonable steps” to “ensure that the organization’s compliance and ethics program is followed, including monitoring and auditing to detect criminal conduct,” and “evaluate periodically the effectiveness of the organization’s” program. U.S.S.G. § 8B2.1(b)(5). Proactive efforts like these may not only be rewarded in connection with the form of any resolution or prosecution (such as through remediation credit or a lower applicable fine range under the Sentencing Guidelines), but more importantly, may avert problems down the line.

- **Internal Audit** – What is the process for determining where and how frequently internal audit will undertake an audit, and what is the rationale behind that process? How are audits carried out? What types of audits would have identified issues relevant to the misconduct? Did those audits occur and what were the findings? What types of relevant audit findings and remediation progress have been reported to management and the board on a regular basis? How have management and the board followed up? How often does internal audit conduct assessments in high-risk areas?
Control Testing – Has the company reviewed and audited its compliance program in
the area relating to the misconduct? More generally, what testing of controls,
collection and analysis of compliance data, and interviews of employees and third
parties does the company undertake? How are the results reported and action items
tracked?

Evolving Updates – How often has the company updated its risk assessments and
reviewed its compliance policies, procedures, and practices? Has the company
undertaken a gap analysis to determine if particular areas of risk are not sufficiently
addressed in its policies, controls, or training? What steps has the company taken to
determine whether policies/procedures/practices make sense for particular business
segments/subsidiaries? Does the company review and adapt its compliance program
based upon lessons learned from its own misconduct and/or that of other companies
facing similar risks?

Culture of Compliance – How often and how does the company measure its culture
of compliance? Does the company seek input from all levels of employees to
determine whether they perceive senior and middle management’s commitment to
compliance? What steps has the company taken in response to its measurement of
the compliance culture?

B. Investigation of Misconduct

Another hallmark of a compliance program that is working effectively is the existence of
a well-functioning and appropriately funded mechanism for the timely and thorough
investigations of any allegations or suspicions of misconduct by the company, its employees, or
agents. An effective investigations structure will also have an established means of documenting
the company’s response, including any disciplinary or remediation measures taken.

Properly Scoped Investigation by Qualified Personnel – How has the company
ensured that the investigations have been properly scoped, and were independent,
objective, appropriately conducted, and properly documented?

Response to Investigations – Have the company’s investigations been used to identify
root causes, system vulnerabilities, and accountability lapses, including among
supervisory managers and senior executives? What has been the process for
responding to investigative findings? How high up in the company do investigative
findings go?
C. Analysis and Remediation of Any Underlying Misconduct

Finally, a hallmark of a compliance program that is working effectively in practice is the extent to which a company is able to conduct a thoughtful root cause analysis of misconduct and timely and appropriately remediate to address the root causes.

Prosecutors evaluating the effectiveness of a compliance program are instructed to reflect back on “the extent and pervasiveness of the criminal misconduct; the number and level of the corporate employees involved; the seriousness, duration, and frequency of the misconduct; and any remedial actions taken by the corporation, including, for example, disciplinary action against past violators uncovered by the prior compliance program, and revisions to corporate compliance programs in light of lessons learned.” JM 9-28.800; see also JM 9-47.120(3)(c) (“to receive full credit for timely and appropriate remediation” under the FCPA Corporate Enforcement Policy, a company should demonstrate “a root cause analysis” and, where appropriate, “remediation to address the root causes”).

Prosecutors should consider “any remedial actions taken by the corporation, including, for example, disciplinary action against past violators uncovered by the prior compliance program.” JM 98-28.800; see also JM 9-47-120(2)(c) (looking to “[a]ppropriate discipline of employees, including those identified by the company as responsible for the misconduct, either through direct participation or failure in oversight, as well as those with supervisory authority over the area in which the criminal conduct occurred” and “any additional steps that demonstrate recognition of the seriousness of the misconduct, acceptance of responsibility for it, and the implementation of measures to reduce the risk of repetition of such misconduct, including measures to identify future risk”).

- **Root Cause Analysis** – What is the company’s root cause analysis of the misconduct at issue? Were any systemic issues identified? Who in the company was involved in making the analysis?

- **Prior Weaknesses** – What controls failed? If policies or procedures should have prohibited the misconduct, were they effectively implemented, and have functions that had ownership of these policies and procedures been held accountable?

- **Payment Systems** – How was the misconduct in question funded (e.g., purchase orders, employee reimbursements, discounts, petty cash)? What processes could have prevented or detected improper access to these funds? Have those processes been improved?
Vendor Management – If vendors were involved in the misconduct, what was the process for vendor selection and did the vendor undergo that process?

Prior Indications – Were there prior opportunities to detect the misconduct in question, such as audit reports identifying relevant control failures or allegations, complaints, or investigations? What is the company’s analysis of why such opportunities were missed?

Remediation – What specific changes has the company made to reduce the risk that the same or similar issues will not occur in the future? What specific remediation has addressed the issues identified in the root cause and missed opportunity analysis?

Accountability – What disciplinary actions did the company take in response to the misconduct and were they timely? Were managers held accountable for misconduct that occurred under their supervision? Did the company consider disciplinary actions for failures in supervision? What is the company’s record (e.g., number and types of disciplinary actions) on employee discipline relating to the types of conduct at issue? Has the company ever terminated or otherwise disciplined anyone (reduced or eliminated bonuses, issued a warning letter, etc.) for the type of misconduct at issue?

1 Many of the topics also appear in the following resources:

- Justice Manual (“JM”)
  - JM 9-47.120 FCPA Corporate Enforcement Policy, available at https://www.justice.gov/jm/jm-9-47000-foreign-corrupt-practices-act-1977#9-47.120.


• Criminal Division corporate resolution agreements, available at https://www.justice.gov/news (the Department of Justice’s (“DOJ”) Public Affairs website contains press releases for all Criminal Division corporate resolutions which contain links to charging documents and agreements).


2 Prosecutors should consider whether certain aspects of a compliance program may be impacted by foreign law. Where a company asserts that it has structured its compliance program in a particular way or has made a compliance decision based on requirements of foreign law, prosecutors should ask the company the basis for the company’s conclusion about foreign law, and how the company has addressed the issue to maintain the integrity and effectiveness of its compliance program while still abiding by foreign law.

3 As discussed in the Justice Manual, many companies operate in complex regulatory environments outside the normal experience of criminal prosecutors. JM 9-28.000. For example, financial institutions such as banks, subject to the Bank Secrecy Act statute and regulations,
Analysis: Lamictal highlights increased class action scrutiny in pharma cases.

The US Court of Appeals for the Third Circuit on 22 April vacated class certification in a lawsuit alleging that GlaxoSmithKline and Teva suppressed generic competition to Lamictal, an anticonvulsant used to treat epilepsy and bipolar disorder. White & Case partner Michael Hamburger, senior associate Adam Acosta and associate Gina Chiappetta analyse how the appellate court’s decision fits into a broader trend of courts clamping down on class certification in pharmaceutical cases.

The Third Circuit’s decision to vacate class certification in Lamictal is the latest in a series of recent judgments rejecting proposed classes in pharmaceutical antitrust cases. In Lamictal, the district court failed to scrutinise the competing proof offered by the parties to ensure that each element of Rule 23 – which sets out the criteria for obtaining class certification – was met by a preponderance of the evidence. In reversing, the Third Circuit emphasised six separate times that trial courts must engage in a “rigorous analysis” of the evidence and arguments at the class certification stage. It further confirmed that putative classes must do more than point to classwide averages when defendants offer evidence suggesting that such averages mask material differences among proposed class members.

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Lamictal and other recent decisions refusing to certify classes of pharmaceutical purchasers, including the US Court of Appeals for the First Circuit’s October 2018 decision in Asacol and the Third Circuit’s earlier decision in Modafinil, follow from the same general rule that the Supreme Court has repeatedly announced: Rule 23 means what it says and each requirement must be established before a class can be certified. Here, we briefly discuss these cases and the related implications for parties litigating whether a pharmaceutical purchaser class should be certified.

**Lamictal**

The direct purchaser plaintiffs in Lamictal alleged that a patent litigation settlement involving anti-epilepsy drug Lamictal constituted an anticompetitive reverse payment agreement under the Supreme Court’s FTC v Actavis decision. In support of class certification, they argued that common evidence, such as general pricing information from economic literature as well as forecasts and transactional data, showed that average generic drug prices decrease as more generic competitors enter a market. Because plaintiffs alleged that the settlement prevented more generic competitors from entering earlier, they argued that their common evidence proved that generic Lamictal prices would have been lower if not for the settlement agreement. They further argued that common impact was established because their expert had prepared a model, which also relied on hypothetical average prices, showing that each class member would have paid less for generic Lamictal if not for the challenged settlement. Even though defendants opposed using averages in this manner to prove injury to each class member, the district court held that plaintiffs’ evidence satisfied Rule 23’s predominance requirement and certified a direct purchaser class.

On interlocutory appeal, the Third Circuit disagreed and vacated the certification order, faulting the district court for not engaging in a “rigorous analysis” of the evidence or resolving several factual disputes concerning plaintiffs’ reliance on averages. For instance, the brand manufacturer claimed that it contracted with pharmacies and promised significant discounts and rebates to those who sold its branded Lamictal product instead of the generic version. Meanwhile, the generic manufacturer contended that it learned about the brand company’s contracting strategy prior to launching its competing generic product and therefore preemptively lowered the price of its generic product to compete. But in plaintiffs’ hypothetical world, the brand company would have simply launched its own generic product to compete, rather than, or in addition to, adopting its contracting strategy.

According to the defendants’ expert, by relying on averages and not accounting for the generic companies’ pre-emptive price lowering and individualised negotiations in the actual world, plaintiffs failed to disclose that up to one-third of the proposed class likely paid less for their purchases than they would have paid in a world without the challenged settlement agreement. The Third Circuit found this point compelling and held that the district court should have seriously considered defendants’ challenges to plaintiffs’ use of averages to prove predominance, but instead it merely “assumed, absent a rigorous analysis”, that such averages could establish classwide injury.

The Third Circuit’s decision clarified how certification questions should be addressed in at least three ways. First, it rejected plaintiffs’ argument that Tyson Foods v Bouaphakeo requires courts to accept any proposed common proof of impact “unless no reasonable juror could believe the common proof at trial”. Rather, Tyson Foods applies only in Fair Labor Standards Act cases where representative evidence is often the only way to prove impact, and not in any other cases, where it remains plaintiffs’ burden to show that their class claims are “capable of common proof at trial by a preponderance of the evidence”.

Second, it criticised the district court for not distinguishing between proof of injury and proof of damages when evaluating predominance. Under the “more lenient predominance standard for damages than for injury”, averages may sometimes be acceptable proof, and classes can at times be certified even though damages issues may need to be tried separately. But that does not make such averaging appropriate to prove impact, because “every plaintiff must be able to show antitrust injury [to itself] through evidence common to the class.” The two issues should not be conflated.
Finally, the district court failed to resolve key factual disputes, assess competing evidence, and weigh conflicting expert testimony. Much of the experts’ injury analyses conflicted with each other, for example, yet the district court did not “scrutinise the evidence to determine what was credible”.

Asacol

Although not cited in Lamictal, the Third Circuit’s decision was motivated by some of the same concerns that led to the First Circuit’s decision in Asacol. There, the First Circuit reversed certification of an indirect purchaser plaintiff class where about 10% of class members were uninjured – they would have purchased defendants’ branded drug product even if the allegedly delayed generic drug product was available sooner. The First Circuit specifically rejected the district court’s proposal to remove these uninjured purchasers only in post-trial claims administration proceedings. Instead, it agreed with defendants that it would violate their Seventh Amendment and due process rights to certify a class without affording them a manageable way to raise “genuine challenges at trial to the assertion of liability by individual members”.

Asacol confirmed that merely seeking class certification “provides no occasion for jettisoning the rules of evidence and procedure, the Seventh Amendment, or the dictate of the Rules Enabling Act”. As the Supreme Court has held, parties have no “different rights in a class proceeding than they could have asserted in an individual action”.

The Asacol ruling has been cited extensively for this point, including outside of the pharmaceutical context. Indeed, relying on Asacol, the US Court of Appeals for the District of Columbia Circuit recently held that where plaintiffs’ proposed evidence found a lack of injury to thousands of class members, the district court correctly concluded that common issues did not predominate as to impact. But Asacol also is notable for refusing to allow relaxed standards for proving damages to be used as a means of showing that all or nearly all class members were injured: classes cannot simply reduce aggregate damages to paper over a failure to prove classwide impact.

AndroGel and Modafinil

In two other direct purchaser cases, the courts rigorously assessed the proffered evidence and found that plaintiffs failed to establish Rule 23’s numerosity requirement: they did not show that “the class is so numerous that joinder of all members is impracticable”. These decisions are in stark contrast to earlier direct purchaser pharmaceutical actions, which often merely noted that the class members were geographically dispersed and held that this fact alone suggested joinder would be impracticable.

First, in AndroGel, the US District Court for the Northern District of Georgia denied a motion to certify a class of 33 direct purchasers that were challenging alleged reverse payment settlements. Rather than simply accepting that the number of class members alone made the class numerous enough, the district court recognised that “unlike the typical class action, in which there are a number of individual plaintiffs with relatively small claims, the plaintiffs’ proposed class consists of very large, sophisticated companies with very large claims.” The court explained that this “means that even though these proposed plaintiffs are widely distributed, they also have the means and the motivation to join this action if they so choose.” The plaintiffs did not appeal.

This denial of class certification follows from a similar denial on numerosity grounds by the Third Circuit in Modafinil. There, the Third Circuit vacated a class certification order because the district court incorrectly “considered the late stage of the litigation as relevant” to whether certification should be granted and “failed to properly consider the ability and motivation of the plaintiffs to proceed as joined, as opposed to individual, parties”. Despite the geographic dispersion of the proposed 22-member class, the Third Circuit observed that the proposed class members appeared likely to proceed as joined parties. This was in part because of the sizable claims of the proposed class members, including three absent class members that each had claims estimated at over $1 billion even before trebling. Accordingly, they could “hardly be considered as candidates who need the aggregate advantages of the class device”. On remand, the district court denied certification for similar reasons.
Lessons learned

For litigators, the common thread in these decisions is that courts are more likely to seriously scrutinise antitrust plaintiffs’ proffered evidence before granting or denying certification than they were in the past. In addition, appellate courts have become more active reversing erroneous certification decisions through interlocutory appeal, rather than following the traditional path of addressing these issues only if they are raised after a trial on the merits. Based on these decisions, litigants should follow certain best practices when preparing for and briefing class certification.

First, do not offer only perfunctory attempts to prove or disprove any Rule 23 element. In years past, for example, many litigators gave short shrift to certain Rule 23(a) requirements, such as adequacy or numerosity. But as Modafinil and AndroGel show, the once-overlooked Rule 23(a) elements can be fatal for plaintiffs who assume district courts will not rigorously analyse the evidence, so antitrust defendants should not reflexively skip past them and focus only on Rule 23(b) issues. By the same token, it is not enough for plaintiffs to argue that adequacy or numerosity exists in a given case merely because earlier class certification orders often found that these elements were satisfied. Rather, parties and courts must address the unique facts and market conditions at issue on a case-by-case basis, with litigators on both sides prepared to argue whether the evidence establishes all Rule 23 elements.

Second, be creative. The novel Seventh Amendment and due process arguments raised by the defendants in Asacol, for example, had not gained much traction in earlier cases. But because they logically flowed from existing Supreme Court precedent like Tyson Foods, the First Circuit readily adopted them. Defendants may be able to achieve the same outcome by continuing to raise logically sound arguments that build off of established precedent, such as the contention that all commercial entities within a single corporate family – a parent company and all of its subsidiaries, for example – should be treated as one class member when conducting the numerosity analysis, rather than counting each of them separately as some courts have done. And plaintiffs, of course, must continue to find ways of actually establishing impact to each class member, as well as feasible methods for identifying and removing uninjured class members at or before trial.

Third, class action plaintiffs that rely on broad averages do so at their own peril, as do class action defendants that do not pressure-test all potential vulnerabilities with such averages. A key theme in Lamictal and Asacol is that including uninjured entities or individuals in a proposed class raises due process and predominance concerns that are likely fatal to certification. Where averages may hide the existence of uninjured class members, such averages are problematic both because they risk imposing liability on defendants when it is known that they did not injure a large number of class members – as in Asacol – and because they may not actually prove injury to the remaining class members. As the DC Circuit has held, where a plaintiffs’ proposed common proof of impact “detects injury where none could exist”, such false positives “shred the plaintiffs’ case for certification” because whatever else the evidence may be doing, it is not proving injury to the proposed class members.

White & Case represented defendants in the In re Asacol Antitrust Litigation and In re AndroGel Antitrust Litigation. Any views expressed in this article are solely those of the authors.
Most Courts Follow 1st Circ. Generic-Delay Ruling's Standard

By Michael Hamburger, Kevin Adam and Abdul Hafiz
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The U.S. Court of Appeals for the First Circuit's landmark In re: Asacol Antitrust Litigation decision holds that no class containing uninjured members can be certified unless, when moving for class certification, plaintiffs offer a manageable way for defendants to contest at trial whether their conduct injured individual class members.[1]

Asacol relies on binding U.S. Supreme Court precedent affirming that a defendant's due process rights and Seventh Amendment right to trial by jury cannot be violated so that a case may proceed as a class action. It also relies on the Rules Enabling Act's prohibition on using the Federal Rules of Civil Procedure to "abridge, enlarge, or modify any substantive right."[2]

Class actions do not give class members special rights, such as a free pass on proving elements of their claims that they would need to prove in individual suits. Thus, because injury is an element of an antitrust offense, a jury, not a claims administrator, must decide whether a defendant's conduct injured each member of a proposed class, just as it would in an individual suit.

For that reason, Asacol rejects the premise that courts may certify a class where the issue of injury to individual class members either will not be decided at all or will be decided only post-trial by a claims administrator relying on hearsay declarations submitted by the class members.

In a recent Law360 guest article, advocates for the plaintiffs bar wrote an article that cited just four trial court decisions and argued that "[m]ost courts to consider the [Asacol] decision have either sharply criticized it or rejected it."

This assertion is wrong. In fact, most decisions — 10 court decisions by our count, and of those, nine apparently overlooked by the authors — have followed Asacol, including one from the second highest court in the land, the U.S. Court of Appeals for the D.C. Circuit, and three from the U.S. District Court for the Southern District of New York.

While some lament that Asacol may lead to fewer certified classes, this concern for certain litigants does
not justify lowering class certification standards, sweeping aside the U.S. Constitution or ignoring statutory commands.

**Asacol's Focus on the Seventh Amendment, Due Process and Rules Enabling Act**

Asacol involved indirect purchasers who claimed they were injured because they would have replaced their brand prescription purchases of Asacol-400 with less-expensive generics if not for the defendants' alleged antitrust violations.[4] The plaintiffs alleged that the defendant orchestrated a product hop, forcing patients to switch from Asacol-400 to one of two newer products, Asacol-HD or Delzicol.

The evidence showed, however, that at least 10% of the class members were uninjured brand loyalists — they would not have taken the generic because they preferred Asacol-400, Asacol-HD or Delzicol.[5]

The defendant identified additional uninjured groups, including those who (1) did not purchase both Asacol-400 and either Asacol-HD or Delzicol, and thus were not switched, (2) stopped taking Asacol before any generic could have entered, and (3) would not have switched to a generic because they had no copay and thus no incentive to switch.[6]

The Asacol plaintiffs offered no way to identify and remove these uninjured purchasers at trial. Nevertheless, the district court certified the class based on promises that class members could prove that they were injured by submitting post-trial, unchallenged affidavits swearing that they would have purchased the generic.[7]

The First Circuit rejected the notion that such post-trial claims administration procedures are constitutional and reversed the order certifying the class. Citing the Supreme Court's Tyson Foods Inc. v. Bouaphakeo decision, it held that inadmissible post-trial hearsay could not be used to prove liability and that the desire to proceed via a class action does not permit "jettisoning the rules of evidence and procedure, the Seventh Amendment, or the dictate of the Rules Enabling Act."[8]

In civil suits seeking recoveries of more than $20, the Seventh Amendment guarantees litigants the right of trial by jury. Asacol held that this right is violated by having a claims administrator, rather than a jury, decide facts necessary to prove an element of an offense, such as which class members are injured.[9]

Defendants also have a due process right to litigate defenses to individual claims, even in the class action context, as the Supreme Court recognized in Wal-Mart Stores Inc. v. Dukes.[10] Asacol found that this right would be violated if a claims administrator could decide which class members were injured, because the defendants would have no "meaningful opportunity to contest" injury to such class members.[11]

Finally, Asacol highlighted that Rule 23(b)(3) imposes an additional requirement: Plaintiffs must prove that common issues predominate over individual ones. For that reason, the mechanism plaintiffs offer for identifying and removing uninjured class members at trial while preserving defendants' constitutional rights must be administratively feasible, in that the need to litigate injury to individual class members will not "predominate and render an adjudication unmanageable."[12]

Further, plaintiffs cannot cover up their failure to propose such a mechanism by offering to reduce total claimed damages.[13] Rather, if plaintiffs fail to offer this manageable blueprint when they move for class certification, then certification must be denied.
Asacol's holding is precisely what precedent and constitutional principles require. In an individual antitrust suit, defendants may demand that a jury decide all facts necessary to establish each element of the claim, including whether their conduct injured the plaintiff. Asacol and Tyson Foods confirm that the Seventh Amendment does not permit a claims administrator to do so.

In addition, Asacol and Wal-Mart v. Dukes confirm that the due process clause and the Rules Enabling Act do not allow courts to prohibit defendants from raising defenses to the individual class members' claims, merely because plaintiffs would like to proceed in a class action.

**Majority of Courts Have Followed the First Circuit's Lead**

It is simply incorrect to contend that most courts have rejected or criticized Asacol. By our count, at least 10 decisions have followed it.

In the Rail Freight Fuel Surcharge Antitrust Litigation matter,[14] the D.C. Circuit affirmed the denial of class certification where at least 12.7% of the class's members were uninjured. Because the only way to decide liability to these members was through individualized adjudication of injury at trial, the D.C. Circuit held that common issues could not predominate, in violation of Rule 23(b)(3).

Citing Asacol, the D.C. Circuit explained that "any winnowing mechanism" to reduce the number of uninjured class members "must be truncated enough to ensure that the common issues predominate, yet robust enough to preserve the defendants' Seventh Amendment and due process rights to contest every element of liability and to present every colorable defense" at or before trial.[15]

Similarly, in Sandoe v. Boston Scientific Corp.,[16] the U.S. District Court for the District of Massachusetts case denied class certification, citing to Asacol and holding "a class cannot be certified without providing the defendant an opportunity to litigate its defenses." Class certification, the court explained, requires a "'reasonable and workable' plan for how the plaintiff will prove class membership in a manner that is protective of the defendant's rights and does not cause individual inquiries to 'overwhelm' common issues." Other decisions in the District of Massachusetts are in accord.[17]

Three cases in the Southern District of New York have followed Asacol in denying class certification. In the first, Hunter v. Time Warner Cable Inc.,[18] the plaintiffs alleged that they received unsolicited calls in violation of the Telephone Consumer Protection Act. After realizing that their mechanism for identifying recipients of these calls would not work, the plaintiffs suggested using class member affidavits instead.

Citing Asacol, the court held that this proposal would not overcome predominance concerns, because defendants "have a due process right to challenge the veracity of those affidavits at trial."[19]

Subsequently, the court reached a similar conclusion in Diverse Partners LP v. Agribank FCB.[20] There, relying on Asacol, the court found that because individual fact-finding was necessary to identify class members, the "complexity of determining class membership in this case makes clear that individual questions predominate," and thus Rule 23(b)(3) was not satisfied.[21]

Most recently, last month the Southern District of New York held that plaintiffs failed to satisfy Rule 23(b)(3)'s predominance requirement in the In re: Aluminum Warehousing Antitrust Litigation matter.[22] The plaintiffs, who were direct purchasers alleging a price fixing scheme in violation of the Sherman Act, relied on their expert's statistical modeling as proof of classwide injury.[23]
But the court found that the expert's modeling was flawed in many respects, notably because it yielded false positives and would include uninjured members in the class.[24] The court's June 23 ruling summarized the law in the circuits after Asacol, Rail Freight and the U.S. Court of Appeals for the Third Circuit's decision in Lamictal as follows: "There is no countervailing post-Comcast authority to these assembled precedents."[25]

Like the decisions discussed above, courts in the Third Circuit have readily adopted Asacol's holding. For example, in the In re: Thalomid and Revlimid Antitrust Litigation matter,[26] the U.S. District Court for the District of New Jersey, the court denied class certification where up to 10% of the class would not have purchased the allegedly delayed generic drug due to brand loyalty and thus was uninjured.

There, the court explained that certification could not be granted without "an appropriate common method of proving injury-in-fact given the presence of" brand loyal purchasers that preserved the defendant's rights to challenge injury-in-fact without causing "individual inquiries to overwhelm common issues."[27]

In June, in the In re: Niaspan Antitrust Litigation matter,[28] the U.S. District Court for the Eastern District of Pennsylvania also denied class certification on predominance grounds, relying in part on Asacol.

Lastly, while not citing Asacol, the Third Circuit in the In re: Lamictal Direct Purchaser Antitrust Litigation matter[29] reached a similar conclusion in vacating class certification. The Third Circuit found that the district court did not conduct a "rigorous analysis" of the evidence to ensure that Rule 23 was satisfied, but instead accepted average prices as the plaintiffs' proposed proof of injury to each class member, even though many members paid prices that deviated from the average and thus may not have been injured.

Because classwide averages masked material differences among class members, such averages were not common proof, and individualized inquiry of injury seemed necessary. This echoes Asacol's holding that where common proof fails to establish injury to all class members, a class cannot be certified unless plaintiffs offer a manageable way to litigate the issue of whether individual class members were injured, in a manner that protects defendants' substantive rights.

Conclusion

Most courts follow Asacol and recognize that Supreme Court precedent requires serious scrutiny of class action plaintiffs' proposed proof. Moving forward, class plaintiffs in antitrust cases will need to ensure that they have a manageable, administratively feasible method for identifying and excluding uninjured class members at or before trial.

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Disclosure: Adam and Gidley were counsel for defendants Warner Chilcott Ltd. and Allergan in the In
re: Asacol matter.

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[2] Id. at 56 (Internal citations and quotations omitted).


[4] As Asacol recognized, no presumption of injury exists in antitrust cases, and therefore plaintiffs must prove that they were in fact injured by the defendants’ allegedly anticompetitive conduct. 907 F.3d at 53.


[6] Id. at 53.

[7] Id. at 47.

[8] Id. at 53 (citing Tyson Foods, Inc. v. Bouaphakeo, 136 S. Ct. 1036, 1048 (2016)).

[9] Id.

[10] 564 U.S. at 367. Tyson Foods reiterated that parties have no "different rights in a class proceeding than they could have asserted in an individual action." 136 S. Ct. at 1048.


[12] Id. at 53–54.

[13] Id. at 55–56.


[15] Id. at 625.


[19] Id. at *38.


[21] Id. at *15 (Internal citations and quotations omitted).


[23] Id. at *69.

[24] Id. at *183–84.

[25] Id. at *141. The court believed that the Second Circuit, which had quoted the D.C. Circuit's earlier Rail Freight decision at length and with approval, would require "a similarly rigorous methodological review" of plaintiffs' proposed proof as required by Asacol, Rail Freight, and Lamictal. See Id.


[27] Id. at *39 (Internal quotations omitted).


Differing Proof Requirements for Global Class Actions: Using Economic Analysis to Guide Future Policymakers

BY NICHOLAS E. POWERS, JOHN ROBERTI, AND KELSE MOEN

THE FUTURE OF ANTITRUST undoubtedly includes an element of private enforcement and recovery. In private enforcement actions asserting antitrust claims on behalf of individuals or firms, the alleged harm may be spread across a large number of purchasers or sellers, making individual actions impractical and requiring recovery through collective actions.

In the United States, private enforcement through collective actions is not new: it has been a critical part of antitrust enforcement for decades. Rule 23 of the Federal Rules of Civil Procedure sets forth the standards for obtaining class certification and is augmented by a long history of court precedent that sets a very high bar for proof at the class certification stage. Outside the United States, in contrast, private actions are still developing, but decisions in Canada and the United Kingdom suggest a lower bar for class certification. Many jurisdictions around the world are just starting to allow collective actions in competition cases.

In deciding on the appropriate standard of proof at the class certification stage, policymakers in emerging jurisdictions may use economic analysis to help make difficult choices. In this article, after surveying the various key standards, we identify different ways in which departures from an optimal standard for judging class actions could, under certain assumptions, harm certain parties or lead to losses in efficiency.

Differing Views on Standards for Establishing Similarity

Most class certification decisions turn on the question of whether the claims of individual class members share sufficiently common questions of law or fact that they should be treated collectively rather than individually. In this article, we describe an optimal standard for the level of proof required to establish whether claims are sufficiently similar to be treated collectively as a class action, maximizing the economic benefits and minimizing the economic costs that class actions entail. In the interests of crafting a broader analysis that can apply globally without the confusion of U.S.-specific jargon, we call the same analysis the “Similarity” standard here.

The United States Requires a Rigorous Analysis of Common Impact at the Class Certification Stage. In the United States, courts place a heavy burden on plaintiffs to prove that class certification is appropriate. Plaintiffs must, in the first instance, show that: “the class is so numerous that joinder of all members is impractical” (the “numerosity” requirement); “there are questions of law or fact common to the class” (the “commonality” requirement); “the claims or defenses of the representative parties are typical of the claims or defenses of the class” (the “typicality” requirement); and “the representative parties will fairly and adequately protect the interests of the class” (the “adequacy” requirement).

In addition to these requirements, a U.S. plaintiff must also meet one of the requirements of Rule 23(b), which is where the fight over class certification usually occurs. In cases where damages are sought, as is common in antitrust class actions, Rule 23(b)(3) governs class certification. Rule 23(b)(3) requires a showing that “questions of law or fact common to class members predominate over any questions affecting only individual members” (the “predominance” requirement) and that “a class action is superior to other available methods for fairly and efficiently adjudicating the controversy” (the “superiority” requirement).

Under U.S. procedural rules, plaintiffs must prove with evidence that they meet each requirement, and that proof
is subject to “rigorous analysis” at the certification stage, particularly as to predominance. To meet this burden of proof, plaintiffs must demonstrate that common evidence will establish that all (or nearly all) class members suffered damage from the alleged conspiracy. This stringent standard often requires U.S. courts to decide a “battle of the experts” before they certify the class and may “entail some overlap with the merits of the plaintiff’s underlying claim.”

**Countries Outside the U.S. Typically Apply a Less Stringent Standard.** Historically, class actions have been much less prevalent outside of the United States. As class action is a relatively new legal vehicle in other jurisdictions, new decisions and legislation continue to modify the bounds of such actions. Even those countries with relatively well-defined class certification regimes—such as Canada and the United Kingdom—have only a fraction of the number of class actions as the United States has. And both Canada and the United Kingdom employ a standard for evaluating evidence at the class certification stage that is less stringent than the U.S.-style rigorous analysis. Other countries approach collective actions more generally without a formal certification stage, particularly in continental Europe.

Canada Requires a Showing that is “Sufficiently Credible or Plausible to Establish Some Basis in Fact.” Canada has one of the longest-standing class action regimes outside of the United States. Canadian courts require significantly less evidence than in the United States and do not weigh the merits of the expert opinions at the class certification stage. To demonstrate common impact among class members, a Canadian plaintiff must present an expert methodology that is “sufficiently credible or plausible to establish some basis in fact for the commonality requirement.” In a leading case on class certification, Pioneer Corp. v. Godfrey, the Supreme Court of Canada held that it was not necessary at the class certification stage to have a methodology that could show that each class member suffered a loss. The Godfrey decision underscored Canada’s view that factual disputes over whether common proof predominates over individualized proof to establish injury need not be evaluated at the class certification stage.

The United Kingdom Considers Whether a Proceeding is “Suitable” for Collective Action. The United Kingdom first allowed antitrust collective actions in 2015, with the passage of the Consumer Rights Act 2015. Under this new class action regime, a class representative can commence proceedings for breaches of competition law on behalf of a defined class of claimants. A class action claim may only proceed, however, if the Competition Appeal Tribunal (CAT) issues a collective proceedings order which requires, among other things, that the Tribunal is satisfied that the individual claims of the class members raise “the same, similar, or related issues of law.” But the U.K. has no analogue to the U.S. predominance requirement. The U.K. requires only the presence of common issues for which collective proceedings provide “an appropriate means for the fair and efficient resolution.”

The main case establishing the standards in the United Kingdom is the U.K. Supreme Court’s decision in Merricks v. Mastercard. The Merricks case involved a proposed collective proceeding on behalf of a class of some 46.2 million people claiming losses over a 16-year period. At the class certification stage, the CAT relied on Canadian jurisprudence for guidance. It accepted that the proposed expert methodology was sound in theory, but refused to issue a collective proceeding order because it was not persuaded that there was sufficient data available to adequately apply that methodology to determine the level of pass-on, and thus the amount of aggregate damages.

The English Court of Appeal set aside the order refusing certification and held, consistent with Canadian jurisprudence, that a proposed class representative need only show “a real prospect of success” for each of the certification requirements. It criticized the CAT for effectively conducting a mini-trial that required Mr. Merricks to establish more than a “real prospect of success” and stated that the court is not required to resolve at the certification stage conflicting issues of fact and evidence that can only be properly resolved at trial when pleadings, and fact and expert discovery are complete.

The Supreme Court broadly upheld the decision of the Court of Appeal and remanded the case back to the CAT to be evaluated applying a different and, in certain respects, lower threshold test. In particular, the Supreme Court held that the CAT erred when it held that difficulties in quantifying damages (because of the likely non-availability of data) were sufficient to require class certification to be denied. The Supreme Court held that, at the class certification stage, the CAT should ask whether the claim is relatively more suited for treatment as a class action or as an individual action. Hence, difficulties quantifying loss that would equally arise in individual proceedings do not, by themselves, provide a basis for refusing certification.

**Economic Analysis: A Framework for Considering Optimal Similarity Standards for Class Certification**

The different treatment of class actions around the world raises difficult choices for policymakers seeking to craft their own legal regimes. Economic analysis may help policymakers more systematically consider the tradeoffs inherent in designing such a regime, such as setting too low or too high a bar to show that prerequisites for class certification have been met, or imposing that bar at relatively earlier or later stages of the case. While antitrust policies across jurisdictions differ in their goals and objectives, the discussion that follows is focused on maximizing economic efficiency. It assumes that the goal of an optimal antitrust class action regime will be to minimize the sum of: (1) deadweight loss resulting from anti-competitive behavior; and (2) the costs of dealing with class actions. However, the framework is general enough (and the mathematical notation is simple enough) to accommodate differing objectives. In some parts of the discussion that follow, we introduce some simple formal mathematical notation to
give the framework some flexibility. However, by using formulas we do not intend to suggest that there exists a single, one-size-fits-all answer to this issue.

For purposes of our analysis, we assume that the hypothetical policymakers are trying to identify the proper level of proof to assess whether members of a potential class have sufficiently similar characteristics, claims and evidence to proceed as one group. The policymaker is trying to decide where to set this Similarity standard.

While there are potentially multiple dimensions to Similarity standards, for the sake of the mathematical framework, we simplify it to a single dimension $S$. We call the lowest imaginable standard, perhaps equivalent to not having a Similarity hurdle to clear at all, $s_0$. We also posit a “maximum” Similarity standard, which can be thought of as a hurdle that no class action could conceivably clear, $s_{\text{max}}$. Between these two extremes lie all potential values of $s$, with lower values corresponding to less strict standards, and the strictness of the standards increasing as $s$ approaches $s_{\text{max}}$. We also assume that there is an optimal value, $s^*$, which corresponds to the optimal standard, in the sense that economic efficiency is maximized, after taking into account considerations related to litigation costs and deterrence.

Policymakers will likely also give some weight to equity considerations, as the relative increase or decrease in litigation awards and settlements for certain values of $s$ could benefit certain parties up and down the supply chain at the expense of others. Economists generally consider these to be transfers, without direct implications for economic efficiency. Still, as a non-economic point, policymakers will value fairness and equity, so any complete theory should take account of these factors as well. Economic transfers may also be relevant to the extent that they alter incentives, and thus behavior, and potentially efficiency.

Our discussion of the costs associated with differing standards will begin with the most direct effects and then consider how the behavior of the relevant entities would differ at different levels of $s$. We thus need to begin by specifying different outcomes, in terms of what happens to various claims when they are or are not certified.

Consider a putative class action (i.e., a lawsuit that has been brought on behalf of a class of plaintiffs but has not yet been certified by the court) and assume that a sufficiently large subset of the claims in the class are different enough that the putative class would not be certified under a higher standard $s^h$, but that the putative class would be certified under a lower standard $s^l$. In the case where the class is certified, we assume that discovery proceeds and that the parties eventually settle.

We turn next to the case where the standard is higher and class certification is denied. Class actions typically arise when economies of scale make it efficient to aggregate common claims. Accordingly, the ultimate outcome when a putative class action is not certified depends in large part on the number of putative plaintiffs, the Similarity of their claims, and the magnitude of individual damages. One potential outcome of non-certification is that some narrower alternative to the original putative class forms, where the narrower class has a stronger Similarity profile than the original class, still satisfies numerosity standards, and is still collectively large enough to justify litigation.

Plaintiffs that were part of the original class but are not part of a narrower class will generally fall into one of two groups: (1) those whose claims are too small to justify individual actions; or (2) those who, either in isolation or in conjunction with other similarly situated plaintiffs, are large enough that they can be brought as individual or joint actions involving a smaller number of plaintiffs. The denial of class certification on Similarity grounds need not end the claims but may result in a reorganization of the claims. For the former group, it may result in a narrower action, whereas for the latter, it may result in multiple or individual actions.

On the other hand, denial of class certification will often cause the putative class action to simply end, without any reorganization. While it is possible that individual purchasers might continue after a denial of class certification—as was seen in the Rail Freight case when a substantial number of large purchasers brought individual actions—the denial of class certification often dooms the case. This occurs when the costs of litigating the smaller, individual claims become prohibitive in light of the expected recovery, so that the plaintiffs and their attorneys are forced to abandon the case altogether. If the underlying claims are meritorious, then causing the entire litigation to end because of defects at the certification level is another social cost that would undermine the compensatory and deterrence goals of private antitrust litigation.

Wherever the standard is set, the relevant parties—potential plaintiffs, potential defendants, and the attorneys who represent them—will adjust their behavior. These changes in behavior have implications for the efficiency of various levels of the Similarity standard, which we turn to now.

Finding the Optimal Standard. It is possible to set too high or too low a bar for class certification, thereby creating a Similarity burden that is not socially optimal. In general, as the Similarity standards bar increases, the probability that a given case will successfully clear the class certification hurdle should decrease. If the bar is too high, then potentially meritorious class actions will not be brought, or they will be brought in a fashion that does not define the class to capture injured parties, or they will be brought and fail at class certification. If the bar is too low, this invites additional, potentially less meritorious class actions to be brought, or class actions where the class is defined improperly to include uninjured parties. To see why, consider the case of a potential class action for which, under the optimal standard $s^*$, the costs associated with bringing a class action just exceed the benefits (in terms of the expected settlement or reward). A tightening of $s$ means that for a given level of cost and effort, the potential for either a settlement or a reward has decreased, creating barriers to bringing meritorious claims.

A relaxation of $s$ means that for a given level of cost and
effort, the potential for either a settlement or a reward has increased, inducing “entry.”

**Costs Associated with Setting Strict Similarity Standards.** There are potential costs associated with setting an overly strict Similarity standard. Using our previous notation, these are situations where $s > s^*$. 

**Many Harmful Parties May Lack Recourse.** A potential direct consequence of an increased incidence (or even risk) of “false negatives” is that fewer putative class actions will be filed in the first place. Since a denial of class certification often ends a case altogether, increasing the likelihood of denial will discourage many plaintiffs from bringing class actions, even when the underlying merits of a case are sound. If even a fraction of the marginal putative class actions—those that would have been brought and cleared the class certification stage under a less strict standard, but that would either not be brought, or would fail under the stricter standard—are meritorious, but involve claims that are not sufficiently large to bring individually, or cannot otherwise be efficiently litigated, the ramifications are potentially significant. Specifically, harmed parties would lack recourse and some legitimate claims that do not on their own warrant the expense of litigation could lose their only viable avenue for compensation. The net result is a potential transfer from those who were harmed to those who committed the antitrust violation.

**Loss of Deterrence Due to False Negatives.** The discussion above illustrates how a higher standard for Similarity could reduce the likelihood that firms committing antitrust violations face some monetary punishment. As firms incorporate this information into their decision-making, it is likely that some decrease in deterrence would follow. Undetected and unpunished violations of antitrust law can yield significant economic gain to firms. On the other hand, the risks associated with violations of the antitrust laws can act as a significant deterrent. Ultimately, the deterrent effect depends on whether the magnitude of expected punishment (in the form of fines and penalties, damages awards, or settlement payments) is large enough to offset the increased profits from collusion.

The higher incidence of false negatives would cause firms to lower their expectations of the monetary punishment associated with a collusive act. This may be particularly true for firms with sufficiently distinct customer bases, where the Similarity hurdle is likely to have the largest impact. In some situations, this could tip the balance so that the decreased expectation of a monetary penalty/punishment would mean that collusion is worth the risk, which could result in more price fixing at lower cost to the colluding firms, a social negative.29

**Possible Reduction in Class Action-Related Economies of Scale with Respect to Litigation Costs.** All things being equal, as the Similarity standard increases, class actions that successfully clear that hurdle will become more homogeneous and the opportunity for inclusion of potential plaintiffs who were legitimately harmed (but in ways that are marginally different from other class members) decreases. Thus, in the course of applying a more rigorous analysis of common impact, there is an increased possibility of “false negatives.” In other words, a more stringent standard increases the risk that plaintiffs who were in fact harmed and for whom the relevant factual and legal questions predominate over individualized questions are, at the class certification stage, found to be sufficiently different to warrant their exclusion or to warrant a denial of class certification.

In such circumstances, where the putative class action fails to clear the Similarity hurdle, one of two things can happen. First, if plaintiffs’ individual or collective claims are large enough to justify stand-alone litigation, potential class members who were found to differ from the rest of the class may file parallel litigation. Similarly, as plaintiffs’ attorneys react to a higher standard, potential plaintiffs who, under the more stringent standard might jeopardize the chances of success at the class certification stage, may be excluded from the class through a narrowing of the class definition, again potentially resulting in an increased number of parallel actions. This potential increase in parallel actions would have the effect of undoing some of the inherent efficiency in class action regimes. Cases with common issues of law and fact would be duplicated, increasing discovery and other litigation costs relative to those that would prevail under the optimal Similarity standard.

**Costs Associated with Setting Similarity Standards Too Low.** On the other hand, there are costs associated with setting a Similarity hurdle too low.

**Settlements and Damages Awards Get Paid Inefficiently.** Lower standards can lead to parties who were not actually harmed getting rewarded, or to parties obtaining less compensation than they should. This can happen through at least two channels.

As previously discussed, the vast majority of certified class actions are resolved through settlement, which is the presumptive outcome of class actions that clear class certification. If some of the class actions achieving class certification are overly broad (in that some members of the class were not harmed) yet eventually settle, plaintiffs who were not actually harmed may receive a settlement award, and defendants who did not actually harm those plaintiffs may pay those settlement awards. While these harms could be ameliorated through settlement agreement provisions or claims administration procedures that screen out uninjured members, as the class gets larger and more complex, these procedures may become difficult to administer.

The corollary to the above point is that payments to plaintiffs who were included in an overly broad (but ultimately meritorious) class, but who were not actually harmed, may result in under-payment to those who actually were harmed. For instance, if a class action contains one million individuals and a settlement agreement provides $100 million to be equally divided among the class, then each individual would receive $100. But if 20 percent of the class was not actually harmed, then the harmed class members receive less...
than they otherwise would. Excluding the unharmed members but keeping the payment the same would lead to the same $100 million being provided to 800,000 individuals, or $125 each. To the extent that a lower standard leads to a broadening of putative classes, the prevalence of this unintended outcome is likely to increase.

Further, a payment to settle a less meritorious class action that under a strict Similarity standard would not have been certified raises its own equity and fairness concerns for later-settling plaintiffs. To the extent that defendants are forced to deplete their resources settling claims in class cases that would not have been certified under an optimal Similarity standard, they will have fewer total resources to settle different, possibly more meritorious claims in the future.

**Higher Costs Associated with Discovery and Litigation of Cases That Lack Merit.** A higher number of cases clearing class certification would, all else being equal, also increase the costs spent by firms on discovery and litigation in class action matters. The expenditure of some of these sums may be worthwhile if an otherwise meritorious case would only receive class certification under the looser standard. If, however, as discussed above, more classes lacking merit get certified, then litigants will also expend resources on discovery and litigation of frivolous cases that do not right wrongs or deter future wrongs, and may result in inequitable transfers of wealth.

**An Increase in “False Positives” Could Undermine the Deterrence Effects Associated with Antitrust Laws.** A simple model can help illustrate the concept. Assume that there are two possible actions for the firm to take—it can either collude or not collude. Assume that the operating profits (ignoring any risks of detection or punishment) from collusion $\pi_c$ are greater than those from not colluding $\pi_n$. Assume further that there is some positive probability of the collusive acts being detected and leading to some large costs in the future.

Let $E(p_c)$ denote the present value of its expected punishment from collusion, taking into account the uncertainty of detection and punishment. In this simplified world, the firm will choose not to collude as long as $\pi_n \geq \pi_c - E(p_c)$ (eq. 1) i.e., the profits from not colluding exceed the profits from collusion, once the expected punishment is taken into account.

Now, suppose that relaxing the Similarity standards makes it more likely that frivolous cases will be brought and will clear the class certification hurdle. The firm, wanting to avoid the risk associated with a trial, will settle. Under these assumptions, it now faces some risk, and therefore an expectation of some positive monetary cost or “punishment”, which we will denote $E(p_n)$, even when it chooses not to collude. Under this new scenario, the firm’s indifference equation becomes $\pi_n - E(p_n) \geq \pi_c - E(p_c)$ (eq. 2) i.e., the firm’s profits from not colluding exceed the profits from collusion, once the expected punishment is taken into account.

While $E(p_c)$ will likely be significantly smaller than $E(p_n)$, it nevertheless may be sufficient to tip the balance in some cases. That is, some firms for whom equation (1) holds may find that equation (2) does not hold, meaning that they would not collude under the optimal standard but would under the lower standard. Accordingly, it is plausible that an increase in frivolous lawsuits actually weakens the deterrence effect.

**An Increased Risk of Lower Merit Claims May Chill Procompetitive Activities.** The basic model presented above is an over-simplification: in reality, firms’ management of antitrust related risks cannot be distilled down to binary decisions. The example above does illustrate, however, that firms will need to be concerned, under some circumstances, not only with whether their activity is actually illegal, but also with the perception that their activity runs afoul of antitrust rules. In an environment where the probability of claims with little merit achieving class certification could be higher, this may be particularly true, as the risks relating to perceived violations are likely higher as well. Claims in which questions related to damages are “sufficiently credible or plausible” to clear class certification, but where those claims are found to be meritless can nevertheless impose costs on firms.

Accordingly, when the bar for class certification is lowered, firms may be less willing to engage in procompetitive or efficiency-enhancing activities that are harmless, if that harmlessness is not sufficiently evident for a court to throw out the case on motions to dismiss or motions for summary judgment.

For instance, suppose that oil and gas companies are accused of colluding to raise prices, after several firms imposed price increases, all of which went into effect simultaneously after an industry-wide trade association meeting. While there is no direct evidence of collusion, the facts are sufficiently circumstantial to allow the plaintiffs to prevail in early motion practice (for example, defeating a motion to dismiss). Let us also assume that the class was certified under a lower certification standard, but has clear Similarity problems that would have precluded certification under a higher standard (for example, it includes both entities whose purchase prices were locked into long-term contracts, and so were not affected by the increase, and those who buy on the spot market, who would be affected).

If we assume that the lack of evidence of collusion suggests parallel pricing rather than illegal price-fixing, the defendants would have a good chance of prevailing on the merits if they went to trial. Nonetheless, a sufficiently risk-averse firm would likely prefer to settle the case to avoid the uncertain outcome of a trial and potentially massive liability to the class. Thus, the expected litigation-related costs associated with benign activities, like attending a trade association event or independently matching competitors’ prices have increased, in part due to the lower hurdle for class certification.

**A Summary of the Tradeoffs.** The process of litigating class actions acts as a tax that imposes costs on society. The justification for this tax is that the threat of litigation and possibly damages awards incentivizes firms to comply with the antitrust laws. Generally speaking, these tax-like costs
are closely related to the level of rigor required to meet the Similarity standard. This defines the central trade-off in setting Similarity standards: a higher standard for obtaining class certification generally results in fewer class actions (or successful class actions) and therefore lowers the “class action tax” but likely weakens the deterrent effect, imposing another set of costs on society.

The table below reorganizes and summarizes the key effects discussed above. Determining the relative importance of these costs is the policymakers’ task. However, the framework presented here should help clarify tradeoffs as antitrust authorities approach this complex, multi-layered problem.

<table>
<thead>
<tr>
<th>Type of Effect</th>
<th>Negative Effects of Setting the Similarity Standards Too High</th>
<th>Negative Effects of Setting the Similarity Standards Too Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributional Effects</td>
<td>Many harmed parties lack recourse, either because classes aren’t certified or because fewer cases will be brought if class certification is less likely</td>
<td>Unharm ed parties wrongly receive remuneration</td>
</tr>
<tr>
<td>Litigation Costs</td>
<td>Splintering of classes leads to duplication of litigation costs</td>
<td>Potential for less compensation to truly harmed parties</td>
</tr>
<tr>
<td>Marketplace Effects</td>
<td>The higher threshold leads to more “false negatives” or fewer class actions being brought, with the potential to significantly weaken deterrence</td>
<td>Increase in “false positives” has the potential to undermine deterrence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Higher risk of frivolous claims may chill some procompetitive activities</td>
</tr>
</tbody>
</table>

**Conclusion**

In the United States, private cases offer the prospect of treble damages and joint and several liability. A false positive in a U.S. case—which becomes more likely if the Similarity standard is not strict—can thus have very significant effects, such as forcing defendants into unwarranted settlements through the threat of massive damages liability. These conditions may also explain why United States policymakers are more comfortable with demanding a higher standard to litigate class actions. Because the monetary rewards of successfully prosecuting an antitrust class action are very high, private actors will have every incentive to bring claims, so the law can demand more of them without the risk of over-deterring private enforcement. The U.S. system also features robust pretrial discovery and information exchange, making the additional rigor more practical.

While the stakes in the United Kingdom and Canada are also high, rather than treble damages both jurisdictions only impose single damages, and the U.K. allows claims for contribution from other defendants, lowering the stakes for antitrust cases as compared to the United States. Both also impose a “loser-pays” rule in most jurisdictions, where the losing party in litigation pays the others’ legal costs. This is in sharp contrast to the “American Rule,” where each party pays its own fees regardless of success on the merits. The loser-pays rule will tend to both dis incentivize plaintiffs from filing frivolous claims to begin with, and incentivize defendants with valid defenses to litigate through trial. Therefore, these jurisdictions already have their own methods of filtering out frivolous claims, and may not need heightened scrutiny at the class certification stage to accomplish the same goal.

In the U.K., antitrust class actions are also heard by the specialist CAT, which may offer more predictability for litigants than a non-specialist jury, alleviating additional litigation risks for defendants proceeding to trial against a certified class and again limiting the downside risk of a false positive. It is notable that in the Godfrey case, though the Supreme Court of Canada permitted class certification without proof of injury to all class members, it also explained that the trial judge would need to conduct a careful analysis of the class members after trial, to exclude any uninjured class members from a damages award. False positives may therefore be more acceptable at the class certification stage, in exchange for higher levels of review later.

Proceedings in Canada and the United Kingdom lack discovery practices as broad as those found in the United States. Setting too high a Similarity burden might be unworkable without establishing more expansive discovery rules. These differences may therefore influence these regimes to adopt a more permissive certification standard.

Most jurisdictions have damages regimes and disclosure rules that are even less expansive than Canada and the United Kingdom. The choices that other regimes make about how to balance the Similarity standard will set the level of difficulty required to obtain a private recovery and, in turn, will help to define the future of private antitrust enforcement in these jurisdictions.

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5 See, e.g., Olean Wholesale Grocery Coop., Inc. v. Bumble Bee Foods LLC, 993 F.3d 774, 791 (9th Cir. 2021) (noting that “[p]laintiffs must establish, predominantly with generalized evidence, that all (or nearly all) members...
of the class suffered damage as a result of Defendants’ alleged anti-competitive conduct") (internal quotation marks and citations omitted); In re Rail Freight Fuel Surcharge Antitrust Litig., 725 F.3d 244, 252 (D.C. Cir. 2013) (“Meeting the predominaence requirement demands more than common evidence the defendants colluded to raise fuel surcharge rates. The plaintiffs must also show that they can prove, through common evidence, that all class members were in fact injured by the alleged conspiracy.”); see also In re Asacol Antitrust Litig., 907 F.3d 42, 53–54 (1st Cir. 2018) (holding, in a case where there are “apparently thousands [of class members] who in fact suffered no injury . . . [t]he need to identify those individuals will predominate”). While employed at Allen & Overy, Messrs. Roberti and Moen represented defendants in Olean v. Bumble Bee, supra. Mr. Moen’s current law firm, O’Melveny & Myers, represented a different defendant in the same case before Mr. Moen was employed there. Dr. Powers’ employer, The Brattle Group, provided expert testimony on class certification to the End Purchaser Plaintiff class in the same case. The views expressed herein are the authors’ own and do not necessarily represent those of the company.6 See Olean, 993 F.3d at 793 (vacating “the district court’s certification of a class for the failure to resolve ‘critical factual disputes’ in a ‘battle of the experts’ regarding commonality” and for failure “to resolve the factual disputes as to how many uninjured class members are included in Plaintiffs’ proposed class—an essential component of predominance”) (quoting Ellis v. Costco Wholesale Corp., 657 F.3d 970, 982 (9th Cir. 2011)); see also Wal-Mart, 564 U.S. at 363 (“[R]ule 23(b)(3) requires the judge to make findings about predominance and superiority before allowing the class.”) (emphasis added).7 Wal-Mart, 564 U.S. at 351; see also Comcast Corp. v. Behrend, 569 U.S. 27, 35 (2013). The analysis typically involves three aspects: (1) “the court must ‘find’ that the requirements of Rule 23 are met”; (2) “the court must resolve all factual or legal disputes relevant to class certification,” including as to experts; and (3) “the court must consider ‘all relevant evidence and arguments,’ including ‘expert testimony.”’ In re Lamictal Direct Purchaser Antitrust Litig., 957 F.3d 184, 191(3d Cir. 2020) (citations omitted). Other federal courts across the country have reached numerous decisions to the same effect. See, e.g., West v. Prudential Sec., Inc., 282 F.3d 935, 938 (7th Cir. 2002) (“Tough questions must be faced and squarely decided, if necessary by holding evidentiary hearings and choosing between competing perspectives.”); In re High-Tech Exp. Antitrust Litig., 289 F.R.D. 555, 567 (N.D. Cal. 2013) (“[C]onducting a thorough review of Plaintiffs’ theory and methodology is consistent with the requirement that the Court conduct a ‘rigorous analysis’ to ensure that the predominance requirement is met.” (citation omitted)); Sheet Metal Workers Local 441 Health & Welfare Plan v. GlaxoSmithKline, PLC, No. 04-5898, 2010 WL 3855552, at *6 (E.D. Pa. Sept. 30, 2010) (“Expert opinions do not escape the ‘rigorous analysis’ requirement of Rule 23.”).8 For example, while class actions are permitted in Singapore as a matter of law, only two class actions were filed between 2000 and 2019. Daniel Chia & Jeanette Wong, Class Actions: Singapore, THOMSON REUTERS PRACTICAL LAW (2019). Other countries, such as Germany, Ireland, South Korea, and Turkey, do not allow class actions at all, although a recent EU Directive will require Member States to begin adopting them. See Directive (EU) 2020/182 of the European Parliament and of the Council of 25 November 2020/1828 on representative actions for the protection of the collective interests of consumers and repealing Directive 2009/22/EC, 2020 O.J. (L 409), 2 ¶ 7 (“This Directive therefore aims to ensure that at Union and national level at least one effective and efficient procedural mechanism for representative actions for injunctive measures and for redress measures is available to consumers in all Member States.”).9 Canada’s competition class action jurisprudence has developed primarily from an important trilogy of Supreme Court cases issued in 2013. See ProSys Consultants Ltd. v. Microsoft Corp., [2013] 3 S.C.R. 477; Infineon Tech. AG v. Option Consommateurs, [2013] 3 S.C.R. 600; SunRype Prods. Ltd. v. Archer Daniels Midland Co., [2013] 3 S.C.R. 545.10 ProSys, [2013] 3 S.C.R. at 481 (“[T]he methodology must offer a realistic prospect of establishing loss on a class-wide basis so that, if the overcharge is eventually established at the trial of the common issues, there is a means by which to demonstrate that it is common to the class”).11 [2019] S.C.C. 42 (Can.).12 This position was reinforced in Mancinelli v. Royal Bank of Canada, [2020] O.N.S.C. 1646 (Can. Ont. Sup. Ct. J.), a recent Ontario Superior Court of Justice decision involving price fixing of foreign exchange products where the Court was reluctant to delve into the factual disputes in the case.13 Competition Act 1998, (1998) § 47B CURRENT LAW c. 41; The Competition Act Tribunal Rules 2015, SI 2015/1648 Part 5, Rules 73, 79.14 The Competition Act Tribunal Rules, supra note 13, Rule 79(2)(a).15 [2019] E.W.C.A. (Civ.) 674.16 See Merricks v. Mastercard Inc., [2017] CAT 16, ¶¶ 58–59.17 See id. ¶¶ 75–78, 87–89. The Tribunal also took issue with lack of relationship between the proposed method of distribution and the actual loss of each class member, which it believed conflicted with compensatory damages principles. See id. ¶¶ 79–84.18 Merricks, [2019] E.W.C.A. (Civ) 674, ¶¶ 39–55.19 See id. ¶¶ 52–53.20 See id. ¶¶ 50–51.21 See Mastercard, Inc. v. Merrick, [2020] U.K.S.C. 51, ¶¶ 45–54.22 Id. ¶¶ 56–57, 67–71, 78–79.23 It may be helpful to think of s as the share of class members that must be shown to be injured for the class action to be certified.24 We recognize that the parties’ approaches to litigation and the outcomes associated with different levels of the commonality standards set within a jurisdiction will depend in large part on whether the discovery requirements at the class certification stage are commensurate with those standards. Ensuring alignment of discovery requirements and the standards (including, but not limited to, commonality) is of course also a very important question for antitrust policy. It is, however, beyond the scope of this article.25 In the United States, almost every successful antitrust damages action settles. See John M. Connor & Robert H. Lande, Not Treble Damages: Cartel Recoveries Are Mostly Less Than Single Damages, 100 IOWA L. REV. 1997 (2015). While acknowledging the lack of systematic data, the authors estimate that “at most perhaps only 1% of filed cartel damages cases have been litigated to a verdict that stands up on appeal.” Id. at 2001–02.26 For instance, in In re Intuniv Antitrust Litigation, a district court originally refused to certify an indirect purchaser class alleging anticompetitive “pay-for-delay” agreements in the pharmaceutical industry. Memorandum and Order, In re Intuniv Antitrust Litig., 1:16-cv-12396-ADB, 2019 WL 3947262, at *7–*8 (D. Mass. Aug. 21, 2019). Nonetheless, the indirect purchasers recently moved for approval of a small classwide settlement against one group of defendants, based on a more limited settlement class. In particular, the new class definition limits the class members by state and explicitly carves out seven different types of purchasers who are excluded from the class. Motion for Preliminary Approval of Settlement, In re Intuniv Antitrust Litig., 1:16-cv-12396-ADB (D. Mass. May 24, 2021).27 Several individual actions were filed in the Rail Freight litigation following the D.C. Circuit’s class certification opinion, including Kellogg Co. v. BNSF Ry. Co., 1:19-cv-02969-BAH (D.D.C. Oct. 2, 2019); N. Indiana Pub. Serv. Co. v. Union Pac. R. Co., 1:19-cv-02927-BAH (D.D.C. Sept. 30, 2019); and Century Aluminum Co. v. BNSF Ry. Co., 1:20-cv-01114-ADB (D.D.C. Apr. 29, 2020).28 See, e.g., Order Denying Renewed Motion for Class Certification, In re Asacol Antitrust Litig., 1:15-cv-12730- DjC, ECF No. 772 (relying on First Circuit vacatur of earlier class certification order).29 A study of the effects of the introduction of the 1993 U.S. Department of Justice’s leniency program finds that cartel discoveries by the DOJ fell by from collusion were higher after 1993 (here, primarily due to an increased risk of cartel discovery). See Nathan H. Miller, Strategic Leniency and Cartel Enforcement, 99 AM. ECON. REV. 750 (2009).30 See, e.g., AT&T Mobility LLC v. Concepcion, 563 U.S. 333, 350 (2011) (“Faced with even a small chance of a devastating loss, defendants will be pressured into settling questionable claims.”).31 Godfrey, [2019] S.C.C. 42 (Can.), ¶¶ 117–120.
An Examination of Global Class Action Regimes After Godfrey

On September 20, 2019, the Supreme Court of Canada (“SCC”) issued a landmark antitrust class action decision in Pioneer Corp. v Godfrey which clarified several procedural questions relating to class actions. Notably, the Godfrey decision addressed the following three important points:

- **Loss as a common issue.** For a class action to succeed, there must be a showing that the class members were injured, but the level or even fact of injury can vary. Godfrey considered the burden to make this showing.

- **Application of the limitation period.** The statute of limitations puts a time limit on when claims can be brought, but there is often a dispute about when the clock started ticking.

- **Umbrella purchaser claims.** Umbrella damages are claims
for purchases from non-cartelists whose prices may have been inflated because of the impact of the cartel on the overall market.

This article examines the difference and commonality in approach currently taken by the courts in Canada, the U.S. and the UK on each of these issues.

More generally, the Godfrey decision is important not just for Canada but potentially for the development of private antitrust damages actions globally. In the EU, private damages regimes developed somewhat slowly, but the volume of cases has been growing rapidly over the past few years and this trend is expected to continue. In particular, while collective action regimes at EU Member State level, if they exist, are mostly still in their infancy, there are now a few notable exceptions. The UK has the most mature collective action regime in the EU: forms of representative, group, and multi-party litigation procedures have long been integral to the legal system, and a collective action regime for damages claims for breaches of antitrust law was introduced in 2015. We believe that other non-EU countries may well follow the lead of the EU in developing their private antitrust damages systems, as they have done in developing their antitrust regimes.

In turn, the EU Member States (and, in particular, the UK) have looked to Canada for precedent on how to develop their private damages systems. Indeed, in Dorothy Gibson v Pride Mobility Products Ltd, the UK Competition Appeal Tribunal (“CAT”) considered that “appropriate guidance” regarding the certification of claims could be derived from the position in Canada and, more importantly, that the SCC’s approach in Pro-Sys Consultants Ltd v Microsoft Corp. to expert evidence on the overcharge should similarly apply under the UK regime when determining whether to certify a class action. In doing so, the CAT expressly dismissed the relevance of U.S. authorities. Similarly, in Merricks v Mastercard Incorporated the UK Court of Appeal evaluated the Canadian jurisprudence on certification and accepted that, albeit not binding on the CAT or the Court of Appeal itself, this jurisprudence perhaps provided the “most useful and proximate model for the UK regime” and the CAT was right to treat it as informing its approach. Given the UK courts’ degree of deference to Canadian jurisprudence, the Godfrey precedent is of interest to European companies also.

John Roberti, Francesca Miotto and Jana Steenholdt

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1 Private enforcement of European Union (EU) competition law has been very significantly boosted by the Damages Directive (Directive 2014/104/EU of November 26, 2014), which has now been implemented in all EU Member States. However, due in part to concerns about the potential for U.S.-style class actions, a consensus was not reached on this subject, and provision for collective redress was not included within the Damages Directive. Whilst the European Commission has issued a non-binding Recommendation on collective redress mechanisms for breaches of citizens’ rights granted under EU law, the availability of collective redress mechanisms in the EU is still limited.

2 Dorothy Gibson v Pride Mobility Products Ltd [2017] CAT 9, paras. 102-105

3 Merricks v Mastercard Incorporated & Anor [2019] EWCA Civ 674, paras. 38-55
| What is required to prove commonality of injury at certification? | For certification, loss-related questions need only be sufficiently credible or plausible but actual suffered loss must be proved at trial to recover damages. The SCC stated that “a plaintiff’s expert’s methodology need only be sufficiently credible or plausible to establish that loss reached the requisite purchaser level.” This means that the methodology need not prove every class member suffered a loss or be able to distinguish those who did. This is a low bar. | A rigorous analysis showing that all class members have suffered the same injury with a common contention is required. This means that the methodology need not prove every class member suffered a loss or be able to distinguish those who did. This is a low bar. | On this issue, the UK position reflects the Canadian approach. Commonality of injury was a central issue in *Merricks v. Mastercard*, in which the Court of Appeal recently confirmed that pass-on to consumers will generally satisfy the test of commonality of issue necessary for certification. In particular, the Court of Appeal noted that the CAT should only have evaluated whether the expert methodology was capable of assessing the level of pass-on to the class and whether there was, or was likely to be, data available to operate the methodology. In doing so, the Court of Appeal endorsed the view that the proposed expert methodology must be simply a suitable and effective means of calculating loss to the class as a whole. This is in line with the CAT’s view that the Canadian approach to expert evidence should be applied similarly in the UK. |

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6. See *In re Asacol Antitrust Litig.*, 907 F.3d 42 (1st Cir. 2018) (rejecting the notion that uninjured class members could be removed in the post-judgment claims administrative process, instead holding that certifying a class with uninjured persons would deny defendants’ rights to challenge whether a plaintiff has suffered an antitrust injury. The court did not go as far as to require every class member to demonstrate standing, but rather the presence of a de minimis number (here 10% was not considered de minimis); *In re Rail Freight Fuel Surcharge Antitrust Litig.*, 725 F.3d 244 (D.C. Cir. 2013) (holding that the class included too many uninjured members (12.7%) and meant that plaintiffs had failed to satisfy Rule 23’s predominance requirement).
7. See *In re Asacol Antitrust Litig.*, 907 F.3d 42 (1st Cir. 2018) (rejecting the notion that uninjured class members could be removed in the post-judgment claims administrative process, instead holding that certifying a class with uninjured persons would deny defendants’ rights to challenge whether a plaintiff has suffered an antitrust injury. The court did not go as far as to require every class member to demonstrate standing, but rather the presence of a de minimis number (here 10% was not considered de minimis); *In re Rail Freight Fuel Surcharge Antitrust Litig.*, 725 F.3d 244 (D.C. Cir. 2013) (holding that the class included too many uninjured members (12.7%) and meant that plaintiffs had failed to satisfy Rule 23’s predominance requirement).
8. The Court of Appeal thus overturned the CAT’s refusal to issue a collective proceedings order, because, the latter held, it was not possible to determine the exact degree of the interchange fee passed on to consumers across all retailers. In particular, the amounts passed on to individual consumers would vary to a great extent and, hence, this would not be a common issue to all members of the class. The Court of Appeal decision has been appealed to the UK Supreme Court, and the appeal is listed to be heard in May 2020.
9. Where it is sufficient that the calculation of global loss is methodologically sound and not – using the language in *Pro-Sys Consultants Ltd v Microsoft Corp.* – “purely theoretical or hypothetical”. The Court of Appeal thus endorsed the view also expressed in Canadian jurisprudence, most notably *Pro-Sys Consultants Ltd v Microsoft Corp.*
<table>
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<th>Are limitation periods subject to discovery?</th>
<th>Canada</th>
<th>United States</th>
<th>United Kingdom</th>
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<td><strong>Statutory limitation periods do not start to run until the violation is discovered.</strong> Section 36 of the Competition Act imposes a two-year limitation period for private actions that runs from the day on which the conduct was engaged in or the day on which criminal proceedings were disposed of, whichever is later. However, in Godfrey, the SCC held that the limitation period “begins to run only when the material facts on which [the] claim is based were discovered… or ought to have been discovered”. This means, at least in theory, that a conspiracy could be actionable many years – even decades – after it is terminated if it remains undiscovered.</td>
<td><strong>There is inconsistent application within the U.S. but class periods are typically expanded during the discovery period without much scrutiny, generally by arguing fraudulent concealment and continuing violation.</strong> An antitrust action must be commenced “within four years after the cause of action accrued” (15 U.S.C. § 15b). However, there are some exceptions to this rule, such as the continuing violation doctrine. The entire limitation period is expanded by continuing violations whereby the plaintiff suffered injury from a new and independent overt act within the statutory period. Each new purchase of a price-fixed product is deemed to extend the limitations period. However, if a party withdraws from an agreement and it is not discovered, the statute of limitations will run. Note that some states may adopt a more liberal standard.</td>
<td><strong>As in Canada, the limitation period is subject to discovery (see below). In the UK, it is also suspended during the competition authority’s investigation (until one year after the decision of the competition authority).</strong> The limitation period is six years from the later of (a) the date on which the infringement of competition law ceases, or (b) the first date on which the claimant knew, or could reasonably be expected to have known, of (i) the infringer’s behavior, (ii) the fact that this behavior constitutes an infringement of competition law, (iii) that he/she has suffered loss or damage arising from that infringement, and (iv) the identity of the infringer. However, for collective action proceedings concerning claims that arose before October 1, 2015, and that follow on from a decision of the European Commission or the Office of Fair Trading, the relevant limitation period is two years from the date on which the relevant decision becomes final.</td>
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<td>Are umbrella damages available?</td>
<td><strong>Umbrella purchaser claims may be difficult to prove, but are allowed to proceed to trial.</strong> In Godfrey, the SCC held that it was not “plain and obvious” that umbrella purchaser claims could not succeed. The burden of proof at trial remains unchanged and the SCC acknowledged that umbrella purchaser claims may be complex or difficult to prove.</td>
<td><strong>In general, umbrella damages are not allowed in the U.S. But there is some precedent allowing them.</strong> Typically, the umbrella damages rule precludes plaintiffs from seeking damages for transactions with parties who were not included in the alleged antitrust conspiracy. However, an influential appellate court (Third Circuit, covering mid-Atlantic states) recently permitted plaintiffs to pursue antitrust damages for products supplied by non-conspiring parties.(^{10})</td>
<td><strong>English courts generally allow for the collection of umbrella damages.</strong> Umbrella damages may be pleaded in collective proceedings. The plaintiff must demonstrate causation and quantify losses, but this can be accomplished with expert testimony.</td>
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\(^{10}\) Requiring the expert methodology only to be “sufficiently credible or plausible” to establish some basis in fact for the commonality requirement.
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John is the partner in charge of Allen & Overy’s Washington, D.C. Antitrust practice and a member of the firm’s Investigations and Litigation practice. John focuses his practice on civil antitrust litigation and investigations. He provides strategic guidance to clients on all issues that relate to antitrust, and represents companies in court and before the agencies in their most important matters.

John is an alumnus of the FTC which, along with the experience developed in private practice, gives him insight into the workings of the FTC and the U.S. Department of Justice’s (DOJ) Antitrust Division. He represents clients in all aspects of government investigations and private antitrust litigation, and has guided clients through complex merger and civil investigations involving a wide range of complex issues. John also has handled high-profile trials and litigation in both private practice and during his tenure with the FTC, and represents clients in high stakes class action litigation. John has particular experience in defending civil cartel cases.

Both Chambers USA and Legal 500 have recognized John as a leading antitrust lawyer for many years. Chambers reports that John provides “strategic mind and his practical, pragmatic advice” and is “fantastic at navigating tricky antitrust matters.” John is a leader in the American Bar Association Antitrust Law Section, and hosts the Section’s weekly podcast on antitrust, consumer protection and privacy law and serves on two non-profit boards supporting children with special needs. He joined Allen & Overy in 2014.

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Francesca is Counsel in the antitrust team in Brussels and is a member of the firm’s life sciences group. Francesca has 13 years’ experience in providing strategic counsel on all aspects of EU competition law in a diverse range of sectors. She has particular experience in advising on complex multi-jurisdictional merger reviews and on some of the most complex investigations by the European Commission (EC) in recent years, including on abuse of dominance issues and cartel settlement procedures. In recent years, Francesca has developed a depth of experience in advising on private enforcement across the EU and beyond.

Francesca has also represented clients in appeal proceedings before the European courts in several high-profile cases.

Recent EU cases include advising major global banks in confidential and parallel antitrust investigations by various competition authorities, including the EC, and acting for Scania in the EC’s trucks cartel investigation and related private damages claims, as well as in appeal proceedings before the General Court of the EU.

Francesca regularly publishes and speaks on competition law, private enforcement and life sciences topics. She is qualified in the UK and Belgium and has spent time working in both the London and Brussels antitrust teams, as well as in our Paris office. Francesca is noted is Who’s Who Legal as a Future Leader, winning praise from peers as an ‘impressive follow-on damages expert who provides strong insights into the Commission’s thinking and likely reactions’ (WWL, 2019).
Jana is an associate in the Investigations and Litigation practice group in the firm’s Washington, D.C. office. Her practice includes supporting clients, namely large global financial services firms, in the conduct of multijurisdictional internal investigations, advocating for them in contentious regulatory proceedings, and advising them on regulatory and compliance matters. She also has experience on congressional inquiry matters. Prior to joining Allen & Overy, Jana worked for the U.S. Senate Committee on Banking, Housing, and Urban Affairs.
In Defense of Class Actions: A Response to Makan Delrahim’s Commentary on the UK *Mastercard* Case

By Michael D. Hausfeld, Irving Scher & Laurence T. Sorkin
I. Introduction

Few would argue with the proposition that, in the antitrust context, indirect purchaser class actions raise more difficult questions of commonality, impact, and manageability than direct purchaser class actions even though there may have been harm sustained at both levels. As a result, indirect purchaser class actions in the United States often are not certified for class treatment under Rule 23 of the Federal Rules of Civil Procedure (“Rule 23”) or comparable class action rules in state courts.

This does not mean, however, that indirect purchaser class actions can or should never be certified. Nor should they be summarily dismissed without first carefully analyzing the nature of the underlying violation, the number of levels in the distribution chain involved, the size and composition of the purported class, the particular features of the industry and products involved, and the economic models proffered by plaintiffs’ economic experts in support of class treatment. Some cases will satisfy the requirements for class certification, and others may not, but in all cases, the decision on whether to certify a class should be made on the basis of the record developed in that case, not on the basis of preconceptions of whether some class actions are legally inappropriate.

II. The Division Article

In a recent article, Makan Delrahim, the Assistant Attorney General in Charge of the Antitrust Division of the U.S. Department of Justice (the “Division”), provided a commentary on the decision of the English Court of Appeal in the Mastercard case, which is now on appeal before the UK Supreme Court. While the ostensible focus of the Division’s article is on a comparison between the treatment in the U.S. and UK of class certification issues in indirect purchaser cases, particularly as related to the UK Mastercard case, most of the article focuses on class actions generally.

Although we agree with the general overview of Rule 23 provided by the Division, we disagree with a number of specific assessments in the article, starting with the Division’s comment that the U.S. experience demonstrates that courts should be wary of class actions because they create a risk of “in terrorem” settlements, meaning that once a class is certified, defendants are under enormous pressure to settle potentially meritless claims in order to avoid the risk of an unwarranted, exorbitant judgment if they should go to trial and lose. This comment disregards the facts that unlike the U.S., there is no treble damage risk in the UK, and the UK has a “loser pays” rule. Additionally, in the UK, but not in the U.S., a defendant can seek contribution from co-defendants in the event of an adverse judgment. Moreover, many of the class actions brought in the U.S. and UK are follow-on actions, where the defendants have already pled guilty or otherwise have been found guilty of the underlying offense giving rise to the private suit. Such follow-on class actions in particular cannot be automatically dismissed as meritless.
More specifically, we question the relevance of the Division’s comments addressed to the narrow questions before the Court of Appeal in the Mastercard case, because unlike Rule 23, there is no requirement that common issues predominate in collective proceedings in the UK, and because unlike Rule 23 practice, where motions for class certification are not generally decided until after there has been discovery on class issues, including damage methodology, the collective proceedings order at issue in Mastercard was decided before the class representative took any discovery whatever. In fact, the U.S. approach to discovery prior to certification has been specifically disavowed in the UK.4

Significantly, the view advanced by the Division’s discussion of potential difficulties in calculating individual damages after an aggregate award has been made5 ignores the requirement of Section 47C(2) of the Competition Act of 1998 to the contrary: “The Tribunal may make an award of damages in collective proceedings without undertaking an assessment of the amount of damages recoverable in respect of the claim of each represented person.”6

While the views of the Division can be instructive on particular aspects of U.S. antitrust law, and unquestionably would be entitled to a measure of deference if presented to a U.S. court in an appropriate submission, it is not clear how the Division’s views on the proper application of Rule 23 would be of assistance to the UK Supreme Court in deciding the Mastercard appeal. Certification in a collective proceeding in the UK is entirely different from certification in the U.S. The questions before the UK Supreme Court are questions of procedure under UK law, and UK procedure does not distinguish between direct and indirect actions. The UK court is not being asked to apply U.S. law, and from a comity perspective, even if U.S. law were implicated, a forum generally is entitled to apply its own procedural rules—in this instance the collective action regime established under the UK Consumer Rights Act of 2015—without regard to the law of any other jurisdiction, particularly in the UK, unless it chooses, in its discretion, to do otherwise.

Convergence, if that is the goal of the views expressed in the Division article, makes little sense with respect to procedural rules precisely because they are procedural, reflecting the cultural and legal traditions of a particular jurisdiction, which normally is respected by other jurisdictions.

While it is true, as the Division article says, that the UK Supreme Court’s Mastercard decision “may . . . have important effects on U.S. companies like Mastercard and their opportunities to compete globally,”7 limiting remedies, including collective redress, for harms caused by the anticompetitive behavior of any company, American or not, cannot in any view be in the interests of the wider global economy, nor the societies in which such companies operate.

The UK Supreme Court might give little, if any, weight to the views expressed in the Division’s article for yet another reason. The Division does not bring class actions in the U.S. courts. Class actions are not part of its enforcement tool kit, and institutionally it has no particular experience or expertise in class action litigation. U.S. government enforcement actions, whether brought to enforce Section 1 or 2 of the Sherman Act, are not brought as class actions. In fact, most of the Division’s enforcement resources are devoted to criminal enforcement and merger actions under
Section 7 of the Clayton Act. And when the Division expresses its views in private antitrust cases in the U.S. Supreme Court, it generally does so by joining in amicus briefs filed by the Solicitor General when the views of the government are requested by the Court.

The views expressed in the Division article on the utility of the class action remedy in antitrust cases are troublesome for another reason as well. None of the billions of dollars collected by the Division each year in antitrust fines goes to victims in the criminal antitrust cases brought by the Division. For most victims, class actions are the only realistic remedy for obtaining justified monetary compensation for their losses. In that regard, the Division does not generally seek restitution or any other form of collective redress for victims of antitrust violations, even when defendants have pled guilty in criminal antitrust cases and when restitution can be required under the relevant federal restitution statutes and sentencing guidelines.8 As the Division’s Antitrust Manual for its attorneys makes clear, private antitrust damages are the preferred method of providing monetary damages to victims of antitrust violations:

Restitution has not been ordered (directly or as a condition of probation) in many cases brought by the Division as the result of several factors: in many of our criminal matters, civil cases have already been filed on behalf of the victims at the time of sentencing, which potentially provide for a recovery of a multiple of actual damages (plus costs and attorneys’ fees); the complexity of antitrust cases; the resulting difficulty of determining damages; and the per se nature of antitrust criminal violations, which relieves the prosecution from having to introduce evidence of harm resulting from the violation to secure a conviction.9

In 2007 the Antitrust Modernization Commission, a bipartisan group of antitrust experts variously appointed by the President, the House and the Senate—and which included Mr. Delrahim as a Commissioner—issued its final report, in which it concluded that current private antitrust enforcement, including class actions, effectively furthered five important antitrust enforcement goals—deterrence, punishment, disgorgement of gains, compensation to victims, and incentives for private attorneys general.10 Indeed, according to the U.S. Supreme Court, the statutory right to bring such suits expresses Congress’s “belief that private antitrust litigation is one of the surest weapons for effective enforcement of the antitrust laws.” 11

As to damage awards, in the United States, antitrust damages need not be proved with mathematical precision in cases brought by individual plaintiffs in their own name. The courts extend individual plaintiffs latitude in proving such damages, recognizing that it would be inequitable to allow a wrongdoer to defeat recovery by insisting on an impossibly high burden of proving the amount of damages. “The vagaries of the marketplace,” as the U.S. Supreme Court has observed, “usually deny us sure knowledge of what a plaintiff’s situation would have been in the absence of the defendant’s violation.”12 Accordingly, U.S. courts have not established impossibly high or unduly complex damage standards in individual cases. A different rule should not apply in class actions if a procedural framework exists for proving damages on a basis that
closely, although imperfectly, approximates the loss that any individual class member may suffer. The Division provides no convincing justification for requiring any greater burden of proof on a class and its members.

The issues raised on the Mastercard appeal are governed entirely by UK law and involve the interpretation of provisions of a collective proceeding under the Competition Act and Competition Appeal Rules of 2015 that markedly differs from Rule 23 in numerous material respects. The UK statute has entirely different standards for certification, including different rules on: the showing required of the plaintiffs’ experts at the certification stage of a proceeding; determining aggregate damages in the first instance; then addressing the distribution of aggregate damage awards to individually injured members; and finally, allocating any portion of a class recovery that may remain after all identifiable injured class members have been compensated.

One of the principal differences between the UK collective proceedings rules and Federal Rule 23 in the U.S. is that there is no requirement of preponderance of common questions in a UK collective proceeding. All that is required is that there be some common issues among the class members.¹³ Despite this fundamental difference, the Division article repeatedly refers to U.S. cases that rely on the predominance of common questions requirement of Rule 23.¹⁴ If anything seems clear, it is that Parliament has decided that predominance of common questions has no place in UK collective proceedings analyses.

### III. Class Actions and Effective Civil Redress

Regardless of jurisdiction, all class action regimes seek to balance two at times seemingly contradictory interests—the interest in providing effective redress for parties injured by antitrust violations whose claims might be too small to proceed individually (the compensatory or restitutionary interest), and the interest in protecting the legitimate interests, due process and otherwise, of defendants whose conduct gave rise to these claims. Different jurisdictions will balance these competing interests differently. Some will conclude, as the UK Parliament has apparently decided, that a top-down approach of deciding aggregate damages first, and then later considering the distribution of damages on an individual basis, is preferable to the bottom-up approach now followed by some U.S. courts, requiring formulaic proof of individual loss with mathematical exactitude.

The UK appears to have decided for public policy reasons that, if given the choice between denying any recovery to claimants with potentially small value claims because of possible imprecision in the calculation of some claimants’ individual damages, and allowing such claims to proceed beyond the certification stage, the better approach is to accept a modicum of imprecision and allow the collective action to proceed, rather than to refuse to certify the action and therefore rule out recovery altogether. Such an approach, after all, would, under appropriate rules, recover the overall damage to the market, provide compensation to actually injured
victims, and by providing for the distribution of unclaimed damages, deprive wrongdoers of their ill-gotten gains from the marketwide harm they have caused. This is particularly so in follow-on cases where there has been a guilty plea or fine or both, and liability is clear. This, of course, reinforces the deterrent effect of the sanction imposed by the government competition authority with respect to the same misconduct. From an apparent public policy point of view, there is much to commend the UK approach.

Class actions have existed in the United States for more than 100 years, and have been recognized as serving a number of important societal functions, as well as contributing to the efficient operation of the judiciary. From a societal point of view, class actions permit the aggregation of claims which, often because of their comparatively small size, would not be brought as individual claims for economic reasons—the inability to find capable counsel to take on the case, or the inability to afford experts needed to provide expert testimony to support the claims. Thus, from the perspective of compensatory justice, class actions often provide the only mechanism by which large numbers of purchasers suffering similar damages from a common wrong can realize any sort of recovery. From the point of view of the courts, class actions provide a mechanism for bundling such claims of many in a single action, thus assuring that the courts are not overwhelmed by an avalanche of virtually identical claims, all of which might have to be needlessly adjudicated separately.

Class actions thus preserve scarce judicial resources by offering the prospect of efficient litigation, as well as the potentially early and dispositive end to litigation because of the binding effect of any judgment or settlement on all class members, including absent class members, after a class has been certified. Indeed, from the perspective of a defendant seeking “global peace” with its customers, the class action mechanism can be a more attractive alternative than the prospect of litigating individually with all who are able to bring suits separately.

This is particularly sensible in the case of a follow-on action such as Mastercard, where guilt has already been established in an action by an antitrust enforcement authority, and the defendant should not be able to fully relitigate the legality of its conduct. In such a case, the issue of illegality is established not by plaintiffs’ counsel in a private suit, but by independent enforcement authority prosecutors who have no economic interest in the outcome of their investigation. In most investigations that result in guilty pleas, certainly in the United States, the enforcement agencies may lack the investigative resources to ascertain or quantify the amount of overcharge or the degree of consumer harm resulting from the violation found. They typically recognize that defendants should be required to make restitution, and that the preferred restitutio

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advised to consider seeking restitution in matters where enforcement agencies have found violations.

IV. UK Collective Proceedings

Opt-out collective proceedings in the UK under the Competition Act of 1998 (as amended by the Consumer Rights Act of 2015) proceed on an opt-out basis for UK residents, but non-UK-domiciled class members may opt-in to the proceedings. Such claims are heard before the Competition Appeal Tribunal (the “CAT”), a specialist tribunal composed of judges and so-called Ordinary Members who are expert in economics, law, business, accountancy and other related fields.

In collective proceedings in the UK, as previously noted, the equivalent of class certification takes place early by way of an application for a collective proceeding order (“CPO”), at which point the CAT may grant a CPO only if it would be just and reasonable for the applicant to be authorized as the class representative and the claims which the applicant seeks to combine are eligible for inclusion in collective proceedings. The eligibility requirement is satisfied if the CAT finds that the individual claims raise the same, similar or related issues of fact or law and are suitable to be brought in collective proceedings. In assessing suitability, the CAT can take into account all matters it thinks fit, including whether the claims are suitable for an aggregate award of damages.

The question as to the factors relevant to an assessment of suitability for an aggregate award were the subject matter of the Tribunal’s refusal to certify the Mastercard case in 2017 and the Court of Appeal’s subsequent remand of the case back to the CAT for a second hearing.

To date only two certification hearings have taken place before the CAT and both were refused. Further applications for CPOs have been made but none have yet been heard as the Tribunal chose to pause all certification hearings pending the Supreme Court’s ruling in the Mastercard Case.

V. The Mastercard Case

The Mastercard case is an opt-out collective proceeding brought before the CAT in 2016 seeking approximately £14 billion (roughly $18 billion) on behalf of a class of 46 million UK consumers. It is a follow-on claim based on a 2007 decision of the European Commission finding that Mastercard’s multilateral interchange fees (“MIFs”) applicable to cross-border payment card transactions violated Article 101 of the Treaty for the Functioning of the European Union by restricting competition between acquiring banks and raising the price of card acceptance charged to retailers. Mastercard appealed the EU Commission decision to the General Court and ultimately to the European Court of Justice, and was unsuccessful in both appeals.
At the time that the collective action was commenced, Mastercard had also been sued in the UK courts in individual actions by some of its largest retail merchants using the reasoning in the Commission Decision to claim for UK interchange fee damages. Mastercard notably lost the first trial resulting in a £68.6 million judgment to Sainsbury’s, the UK supermarket chain. This was upheld in the Court of Appeal, and the case is now on appeal to the UK Supreme Court.

The collective proceeding brought against Mastercard is thus a follow-on action, where Mastercard’s liability for market-wide price fixing had been established by way of an infringement decision, and could not be relitigated again. The proposed class representative argues that the merchants passed on Mastercard’s overcharge to their customers in the form of higher retail prices.

In July 2017, the CAT refused to grant a CPO to Walter Merricks, the proposed class representative and former financial ombudsman with a long career of public service, for two principal reasons: first, the CAT found that at the hearing Mr. Merricks had not pointed to sufficient data to facilitate the use of the methodology proposed by his experts to determine how the overcharges may have been passed on to consumers; and, second, the CAT ruled that Mr. Merricks had not put forward any plausible means of calculating the losses sustained by class members on an individual basis so as to allow for the distribution of an aggregate award of damages.

However, the Court of Appeal overturned the CAT’s ruling and remanded the case back to the CAT for a second certification hearing. The Court of Appeal held, inter alia, that the CAT had applied too strict a test at the CPO stage, and that the class representative only had to demonstrate that the claims have a “real prospect of success.” In essence, the Court of Appeal held that the CAT had erroneously required too much of the proposed class representative at the certification stage.

With regard to the calculation and distribution of an aggregate award of damages, the Court of Appeal held that there was no requirement under Section 47C(2) of the UK Competition Act to approach the assessment of an aggregate award through the medium of a calculation of individual loss and the appellant’s experts have not attempted to do so. In that they have the support of the Canadian authorities which in cases like Microsoft have approved a top-down method of calculation on the basis that the level of pass-on to the class as a whole will be a common issue for all individual claimants.

Insofar as the distribution of an aggregate award is concerned, the Court of Appeal saw no reason to depart from the approach employed for the purposes of calculating the award. In the Court’s view, a loss-based method of distribution is not mandated by the rules. The Court also held that distribution is not a matter for certification but rather determination following trial.
Mastercard’s appeal of the Court of Appeal’s ruling was heard by the Supreme Court in May of this year, and the Supreme Court’s ruling will set the standard as to the test to be applied by the CAT at the certification stage in the Mastercard case and in the further collective cases which will proceed to certification hearings. If the Mastercard case is remanded to the CAT, then it may be certified and permitted to continue to trial. Alternatively, the CAT could refuse to certify the action for a second time, or may certify only part of the proposed class. If the claim is permitted to continue to trial, it can be expected that factual discovery will be taken from Mastercard and third parties, including retailers, in order to develop data relevant to damages.

Courts should be cognizant of the difficulties that claimants in competition cases face in attempting to determine what a price would have been in a hypothetical world “but for” a competition infringement. As the European Commission noted in its damages guidance document to national courts: “Quantification of harm in competition cases has always, by its very nature, been characterized by considerable limits to the degree of certainty and precision that can be expected. Sometimes only approximate estimates are possible.”

If a CPO is granted, Mastercard will then have had a full and fair opportunity to present evidence of its own, cross-examine plaintiffs’ experts, and dispute the aggregate amount claimed on behalf of the class. But once questions of overcharge and pass-on are determined, and the value of an aggregate award of damages determined by the CAT, it seems both reasonable and appropriate for the CAT at that point to determine to whom and in what amounts damages should be allocated and distributed to individual class members.

VI. Conclusion

In providing its views of U.S. class action law, the Division’s commentary exalts damage analysis above the importance of recovery for misconduct, and allows economic opinions to control class certification determinations that are fundamentally legal in nature. The Division’s approach fails to acknowledge any of the interests served by meaningful collective redress in competition cases.

Price fixing involves serious harm to the market. It is not directed at any specific victim, but rather to the price setting function of the market as a whole. While the unlawful conduct may cause different magnitudes of injury throughout the chain of distribution, those differences do not alter the fact of the aggregate impact on the market. Indeed, the 2014 European Commission’s Damages Directive provides that courts should adopt a rebuttable presumption of injurious impact on the market following a Commission determination of unlawful price fixing.

The Mastercard case presents the UK Supreme Court with the opportunity, early in the life of the UK’s young collective proceedings regime, to ensure that the test for proposed class actions is
set at an appropriate level. That level ought to be one which takes into account the complexities of calculating loss in competition law claims and the unequal position of class representative and defendant from an evidentiary point of view. It ought also be one that does not prove unduly burdensome for would-be representatives such that valid claims fail, rights to compensation are not vindicated, and the proceeds of anticompetitive conduct remain with the wrongdoer.

It is certainly within the province of the UK courts to choose an approach that fulfills the purpose of the enabling act—ensuring that there is an effective means of consumer access to compensation, collectively and individually, for violations of the UK competition laws.
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3 Division article, p. 3.


5 Division article, pp. 10, 12.

6 As introduced by the Consumer Rights Act of 2015.

7 Division article, p. 2.


9 Division Manual, p. IV-89.


11 Minnesota Min. & Mfg. Co. v. New Jersey Wood Finishing Co., 381 U.S.311, 318 (1965); see also Zenith Radio Corp. v. Hazeltine Research, Inc., 395 U.S. 100, 130-31 (1969) (“[T]he purpose of giving private parties treble-damage and injunctive remedies was not merely to provide private relief, but was to serve as well the high purpose of enforcing the antitrust laws.


13 The Competition Appeal Tribunal Guide specifies at 6.37: “Where only certain issues in the claims constitute common issues, there is no requirement that those must predominate over the remaining individual issues in order for it to be suitable for the part of the claims covering the common issues to be brought in collective proceedings.”

14 Division article, pp. 6-7, 9, 12.


17 Section 47B(5) of the Competition Act 1998.

18 Section 47B(6) of the Competition Act 1998.


21 Id. at Paras. 75-78.

22 Id. at Paras. 87-89.

23 Merricks v. Mastercard Inc. and others [2019] EWCA Civ 674, at Para. 44.

24 Id.


26 Id. at Para. 62.

27 European Commission, Communication on quantifying harm in actions for damages based on breaches of Article 101 or 102 TFEU 2013/C 167/07, at Para. 9.

28 See Tysons Foods, Inc. v. Bouaphakeo, 136 S. Ct. 1036 (2016), in which the U.S. Supreme Court adopted that approach to Rule 23: first determining aggregate damages, then eliminating uninjured class members, and only then compensating those class members who have shown actual damages.