# Antitrust Chronicle

OCTOBER · FALL 2019 · VOLUME 1(1)

CPI COMPETITION POLICY INTERNATIONAL

# TABLE OF CONTENTS


**03** Letter from the Editor

**04** Summaries

**06** What's Next?
Announcements

**08** Compulsory Licensing: An Underrated Antitrust Remedy
*By Richard Gilbert*

**14** Restoring Antitrust, Restoring Competition
*By John E. Kwoka*

**20** Antitrust and Tech: Europe and the United States Differ, and it Matters
*By Gregory J. Werden & Luke M. Froeb*

**24** Vertical Media Mergers: An Anatomy of Two Cases in Portugal
*By Ana Sofia Rodrigues*

**29** Business Models, Incentives, and Theories of Harm
*By Cristina Caffarra*

**35** CADE and the Challenges of the Digital Economy
*By Patricia Alessandra Morita Sakowski & Christine Park*

**40** Identifying Empirically the Extent of Economic Analysis and the Legal Standards Applied in Antitrust Enforcement: A Methodology
*By Yannis Katsoulacos*

**46** Why Common Shareholdings Should Not be Considered in Merger Analysis
*By A. Neil Campbell*

**55** "Multi-Homing by all Means": Russian Competition Policy Towards Digital Platforms
*By Svetlana Avdasheva*

**61** The Evolution of Competition Law in Digital Markets in India
*By Augustine Peter & Neha Singh*

## Editorial Team

**Chairman & Founder**
David S. Evans

**President**
Elisa V. Mariscal

**Senior Managing Director**
Elisa Ramundo

**Editor in Chief**
Samuel Sadden

**Senior Editor**
Nancy Hoch

**Latin America Editor**
Jan Roth

**Associate Editor**
Andrew Leyden

**Junior Editor**
Jeff Boyd

## Editorial Advisory Board

**Editorial Board Chairman**
**Richard Schmalensee**
*MIT Sloan School of Management*

**Rosa Abrantes-Metz**
*Stern School of Business*

**Kent Bernard**
*Fordham School of Law*

**Rachel Brandenburger**
*Oxford University*

**Dennis W. Carlton**
*Booth School of Business*

**Adrian Emch**
*Hogan Lovells*

**Kyriakos Fountoukakos**
*Herbert Smith Freehills*

**Jay Himes**
*Labaton Sucharow*

**James Killick**
*White & Case*

**Stephen Kinsella**
*Sidley Austin*

**Ioannis Lianos**
*University College London*

**Robert O'Donoghue**
*Brick Court Chambers*

**Aaron Panner**
*Kellogg, Hansen, Todd, Figel & Frederick*

**Vanessa Yanhua Zhang**
*Renmin University*


# LETTER FROM THE EDITOR

Dear Readers,

The October 2019 CPI Antitrust Chronicle includes articles based on presentations from Special Policy Sessions ("SPS") and invited lectures of the 14th Annual CRESSE Conference organized on July 5-7 in Rhodes, Greece.

CRESSE (www.cresse.info), is an international network of academics and other professionals, with an interest in Competition Policy and Sectoral Regulation. Every year CRESSE organizes an international conference in Greece that is now widely recognized as one of the top academic conferences in the economics of competition policy and regulation worldwide. For the 2019 Conference, Keynote Speakers included Robert Porter, Richard Gilbert, and William Kovacic. An important feature of the annual CRESSE Conference is the organization of a number of SPS in which important topical issues of competition policy are discussed between academics (economists and lawyers), policy makers, corporate representatives, and practitioners.

The 15th Annual CRESSE Conference will take place on June 26-28, 2020 in Crete, Greece and will feature Keynote Speakers Jean Tirole, Volker Nocke, and Einer Elhauge. We look forward to another great conference. CRESSE and CPI will collaborate in providing awards to:

- The 3 **best papers** by young researchers (selection will be undertaken by the Scientific Committee of CRESSE)

- The **most-read 2019** "CRESSE Insights" CPI Antitrust Chronicle 2019

Winners will be announced during the final dinner at the CRESSE Conference on June 28, 2020.

The contributions here include articles by a number of prominent economists and legal experts from a variety of jurisdictions including the EU, U.S., Canada, India, Brazil, and Russia.

Thank you to all the participants at the 14th Annual CRESSE Conference and to this distinguished group of authors.

Yannis Katsoulacos
CRESSE & Athens University of Economics and Business

# SUMMARIES

08

## Compulsory Licensing: An Underrated Antitrust Remedy

*By Richard Gilbert*

Compulsory licensing of intellectual property is a common remedy for harms to competition from mergers, but antitrust enforcers generally shun compulsory licensing as a remedy for monopolization because they are concerned that actual or threatened compulsory licensing deters innovation. However, neither anecdotal nor empirical evidence supports a conclusion that infrequent instances of compulsory licensing have deterred innovation by firms that were compelled to license their intellectual property and there is considerable evidence that compulsory licensing promotes competition and follow-on innovation by allowing innovators to build on the licensed technologies. Compulsory licensing should be used sparingly because it is difficult to administer and can harm competition in some situations, but antitrust enforcers should keep compulsory licensing in their tool box to address abuse of market dominance as well as to remedy competition concerns for mergers.

14

## Restoring Antitrust, Restoring Competition

*By John E. Kwoka*

Over the past twenty years, merger enforcement in the U.S. has narrowed its focus and led to significant increases in concentration and market power throughout the economy. This essay proposes several measures to help restore antitrust and thereby restore competition. These are (1) to enforce the Merger Guidelines more strictly, relying to a greater degree on structural criteria to guide enforcement, (2) to utilize the doctrine of potential competition more aggressively, thereby expanding the enforcement range, including in the tech sector, and (3) to sharply limit the use of merger remedies, especially conduct remedies that have been shown too often to be ineffective. It concludes with a plea for greater data disclosure by merging companies and also by the agencies so as to facilitate evaluation of agency merger enforcement.

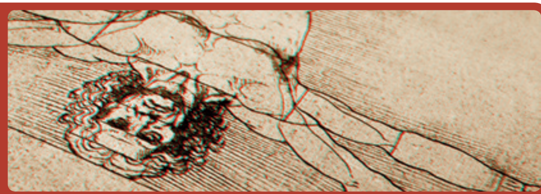
20

## Antitrust and Tech: Europe and the United States Differ, and it Matters

*By Gregory J. Werden & Luke M. Froeb*

European enforcers have brought high-profile antitrust cases against the tech giants, and both activists and members of Congress are calling for action in the United States. This short note identifies ten hard-wired differences between the European and American enforcement regimes that make very it difficult for the U.S. antitrust enforcement agencies to emulate their European counterparts. This note also identifies a few other points of contrast between Europe and the United States that affect antitrust enforcement against tech giants going forward.

24



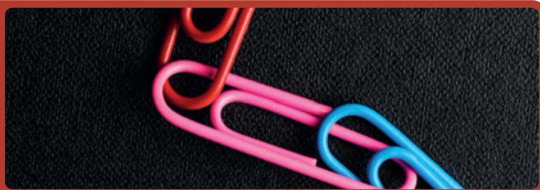
## Vertical Media Mergers: An Anatomy of Two Cases in Portugal

*By Ana Sofia Rodrigues*

Recent years have been marked by a renewed interest in vertical mergers. The highest profile case was the *AT&T/Time Warner* deal. Judicial decisions on the case, both the District Court's (June 2018) and the Court of Appeals (February 2019) question the adequacy of bargaining models and the lack of real-world data to inform the assessment. This article explores these aspects having as a backdrop two vertical media mergers that were not allowed to go through by the Autoridade da Concorrência – the *Altice/Media Capital* and the *Sport TV* mergers. The first, illustrates how the robustness of the assessment is strengthened by vertical arithmetic and bargaining models fed with accurate estimates for key payoff components. The second, is illustrative of how vertical mergers may give rise to concerns due to coordinated effects. Furthermore, we argue for *ex post* analysis of recent vertical media merger decisions to shed light on the debate.

# SUMMARIES

29



## Business Models, Incentives, and Theories of Harm
*By Cristina Caffarra*

The known limitations of traditional antitrust rules are no reason for a view that "antitrust is just inadequate to deal with the issues raised by large digital platforms, we need regulation." Smart regulation is a complement with a key role to play but we can and should pursue antitrust cases more creatively without being shackled by lack of precedent, and give substantive content to notions of "exploitative abuse" – not confined just to excess pricing. In articulating and developing theories of harm that "fit the conduct," we need to consider how different business models and monetization strategies shape incentives and drive behavior. There is no single "GAFAM" issue – from "super aggregators" to true platforms, incentives differ and will contribute (together with economies of scope in data and behavioral conduct of consumers) to different priors, raising different questions and levels of concern.

35

## CADE and the Challenges of the Digital Economy
*By Patricia Alessandra Morita Sakowski & Christine Park*

CADE has been focusing considerable efforts to respond adequately to the challenges raised by the digital economy in the recent years. They include primarily institutional strengthening; domestic and international cooperation; and advocacy work. The first comprises training of its staff, bringing capacities in-house and the development of its analytical and enforcement tools. Cooperation with other government bodies that have significant interplay with competition enforcement in the digital economy has also been on the agenda, as well as international arenas to discuss the development of competition policy within the digital economy. CADE has also been conducting advocacy efforts, especially through studies conducted by its Department of Economic Studies. In this endeavor, more questions than answers arise, but CADE believes it has been on track in the search of possible answers and is eager to debate and refine them with other antitrust authorities, the academia and practitioners in the international arena.

40

## Identifying Empirically the Extent of Economic Analysis and the Legal Standards Applied in Antitrust Enforcement: A Methodology
*By Yannis Katsoulacos*

This paper presents a substantially revised and condensed version of the methodology developed by and described in Y. Katsoulacos, S. Avdasheva & S. Golovanova), in *Festschrift in Honour of Frederic Jenny*, Concurrences Review (2018), for identifying empirically the extent of economic analysis and the legal standards applied in antitrust enforcement.

46

## Why Common Shareholdings Should Not be Considered in Merger Analysis
*By A. Neil Campbell*

A burgeoning economics literature has raised concerns that "common shareholdings" by institutional investors in multiple public companies may give rise to soft competition and the exercise of market power in concentrated oligopolies. However, the legal and practical relevance of such shareholdings in merger analysis has not been carefully considered. In most cases – at least under well-developed merger control frameworks in jurisdictions such as Canada, the U.S., and the EU – consideration of common shareholdings is likely to be a giant waste of time for agencies, merging parties and third parties. In a merger review, it will be difficult for agencies to establish the causal connection to material increases in market power or how the mechanisms by which this will occur.

# SUMMARIES

55

## "Multi-Homing by all Means": Russian Competition Policy Towards Digital Platforms

*By Svetlana Avdasheva*

Competition enforcement towards digital platforms in Russia concentrates on the issues of multi-homing for inter-platform competition (competition between digital platforms) and non-discriminatory access for intra-platform competition (competition on digital platforms). Both in antitrust enforcement (*Google*-2015 and *Microsoft*-2017 cases in Russia) and under merger approval (*Bayer/Monsanto*-2018 and *Uber/Yandex*-2017) theory of harm is based on both anticompetitive exclusionary effects and exploitative effects in adjacent markets. Typical remedies are "non-discriminatory access" and a ban on any form of single-homing clauses. Under international merger approval, the competition authority may elaborate remedies to support the upgrading in adjacent markets. Russian competition enforcement towards digital platforms does not contradict the overall attitude to the platforms in competition law and economics (while being criticized for protectionist intent).

61

## The Evolution of Competition Law in Digital Markets in India

*By Augustine Peter & Neha Singh*

Digital markets in India are growing exponentially and this brings with it complexities in enforcement in all segments of competition law. New forms of collusion using artificial intelligence have emerged. Hub and spoke cartels pose distinct problems. While dealing with digital markets, market definition needs to be nuanced. The Indian authority has had occasion to handle a few cases related to horizontal as well as vertical agreements in the digital space. As regards online resale price maintenance the rules evolved in offline cases are expected to apply, mutatis mutandis. Not insignificant market power in the relevant market is a necessary pre-condition for looking at vertical restraints. The role of data and network effects in abusive conduct was noticed by the Commission in *Google* I. However, the Commission had no occasion to examine if data is an essential facility. While looking at predatory pricing in the digital market the Commission has been cautious while defining market and dominance. The way price is defined in law, the existing provisions are sufficient to address anti-competitive agreements, including cartels, as also abuse of dominant position, though the Commission has been seen to be cautious not to err on the side of activism. However, the current asset/turnover thresholds for mandatory merger notification has been found to be inadequate for digital markets, and the recent report of the Competition Law Review Committee has recommended "transaction value" based thresholds.

# WHAT'S NEXT?

For November 2019, we will feature Chronicles focused on issues related to (1) **Consumer Welfare**; and (2) **Compliance**.

# ANNOUNCEMENTS

CPI wants to hear from our subscribers. In 2019, we will be reaching out to members of our community for your feedback and ideas. Let us know what you want (or don't want) to see, at: antitrustchronicle@competitionpolicyinternational.com.

CPI ANTITRUST CHRONICLES DECEMBER 2019

For December 2019, we will feature Chronicles focused on issues related to (1) **Global Digital Reports**; and (2) **Inequality**.

Contributions to the Antitrust Chronicle are about 2,500 – 4,000 words long. They should be lightly cited and not be written as long law-review articles with many in-depth footnotes. As with all CPI publications, articles for the CPI Antitrust Chronicle should be written clearly and with the reader always in mind.

Interested authors should send their contributions to Sam Sadden (ssadden@competitionpolicyinternational.com) with the subject line "Antitrust Chronicle," a short bio and picture(s) of the author(s).

The CPI Editorial Team will evaluate all submissions and will publish the best papers. Authors can submit papers on any topic related to competition and regulation, however, priority will be given to articles addressing the abovementioned topics. Co-authors are always welcome.

# COMPULSORY LICENSING: AN UNDERRATED ANTITRUST REMEDY

BY RICHARD GILBERT[1]

1 Emeritus Professor of Economics, University of California, Berkeley.

# I. INTRODUCTION

What antitrust action had the most significant positive impact on the welfare of American consumers? I expect many would nominate the Modified Final Judgment in *U.S. v. AT&T*, which cleaved the sprawling Bell System (AT&T and its subsidiaries) into Regional Bell Operating Companies, a long-distance company, and separate manufacturing and R&D facilities. Others might choose the breakup of the U.S. petroleum industry that resulted from *U.S. v. Standard Oil* or the antitrust case brought by the Department of Justice ("DOJ") and several states against Microsoft.

These cases deserve to be on a list of greatest antitrust hits. But I expect that few would call out one of my favorites: A provision in a 1956 consent decree that settled an antitrust case filed by the DOJ against AT&T which required AT&T to offer royalty-free licenses to nearly all of its existing U.S. patents and to license future patents on a non-discriminatory basis to all applicants upon the payment of reasonable royalties, provided that the licensees offer licenses at reasonable royalties to their own relevant patents in return.[2] In 1956 AT&T and its subsidiaries owned more than 7800 patents that covered many basic and applied technologies, including transistors, cellular telephony, switching, solar cells, and the laser. While the Bell System companies might have licensed their patents without the consent decree,[3] that was not assured, and the broad compulsory license eliminated potential barriers to competition and innovation for a wide range of technical applications.[4]

Gordon Moore, a co-founder of Intel, affirmed that the 1956 decree was "one of the most important developments for the commercial semiconductor industry."[5] Peter Grindley and David Teece added unequivocally that "[AT&T's licensing policy shaped by antitrust policy] … remains as one of the most unheralded contributions to economic development – possibly far exceeding the Marshall plan in terms of the wealth generation capability it established abroad and in the United States."[6] Others have credited the consent decree for facilitating the success of the Unix operating system.[7]

Another antitrust action that deserves honorable mention is the 1975 consent decree that settled allegations by the Federal Trade Commission ("FTC") that Xerox had monopolized the market for plain paper copiers. In the settlement, Xerox agreed to offer nonexclusive licenses for any three of its plain paper copier patents at no royalty and to license other patents with a maximum royalty of 1.5 percent of the licensee's sales.[8]

The FTC case is unusual because it did not allege that Xerox engaged in the kind of exclusionary conduct that is necessary under current antitrust policy to sustain liability for monopolization. Willard Tom wrote in reference to the complaint that "A group of extremely talented people of obvious dedication and good will took a course that, with a quarter-century of hindsight, seems in good measure to have been wrong."[9] However, he added that "More deeply, the case is unsettling because, for all the case's flaws, the FTC's remedy actually seems to have done quite a bit of good, by breaking up a 'killer patent portfolio' that threatened to insulate Xerox from competition, not for seventeen years, but forever, bringing with it the sluggish unimaginativeness long thought characteristic of monopoly."[10]

---

2 The antitrust case sought to separate AT&T from its manufacturing subsidiary Western Electric and to confine AT&T to basic telephone services. The settlement did not divest Western Electric from AT&T, but precluded the company from manufacturing equipment other than that used by the Bell System, and enjoined AT&T from engaging in any business other than furnishing common carrier communications services. See "Report of the Antitrust Subcommittee of the Committee on the Judiciary," House of Representatives, Eighty-Sixth Congress, first session, January 30, 1959 at 351.

3 In 1956, AT&T had existing cross-licensing arrangements with General Electric, RCA, and Westinghouse. *Ibid.* at 353.

4 In the same year, a consent decree that settled a case brought by the DOJ against IBM required that IBM grant licenses at a reasonable royalty to its patents on tabulating and electronic data processing machinery, conditional on agreements by the licensees to license their own patents. *U.S. v. International Business Machines*, Final Judgment, U.S. District Court for the Southern District of New York, January 25, 1956.

5 National Research Council, "Capitalizing on New Needs and New Opportunities: Government-Industry Partnerships in Biotechnology and Information Technologies," The National Academies Press (2001) at 86.

6 Peter C. Grindley & David J. Teece, "Licensing and Cross-Licensing in Semiconductors and Electronics," 39 Cal. Mgmt. Rev. 8, 13 (1997).

7 See Matthew Lasar, "The Unix revolution – thank you Uncle Sam?," Ars Technica, July 19, 2011, available at https://arstechnica.com/tech-policy/2011/07/should-we-thank-for-feds-for-the-success-of-unix/, accessed August 19, 2019.

8 *In the Matter of Xerox Corporation, Docket* 8909, Decision, July 29, 1975, 86 F.T.C. 370.

9 Willard Tom, "The 1975 Xerox Consent Decree: Ancient Artifacts and Current Tensions," 68 Antitrust L. J. 967, 989 (2001).

10 *Ibid.* at 967-968.

Competition and innovation flourished for plain paper copiers following the 1975 consent decree. Although Xerox was an innovative company before the consent decree, its innovations were mainly limited to technological advances in the quality and speed of reproduction. After 1975, new entrants brought changes of a different character, including document feed devices (the Kodak 150) and the "convenience copier" (the Savin 750), which was a new product market that Xerox had ignored.[11]

The 1956 AT&T consent decree and the 1975 Xerox consent decree demonstrate benefits from compulsory licensing for competition and innovation. Nonetheless, these are only anecdotes and there is a common view that antitrust enforcement should shun compulsory licensing as a remedy for monopolization because it severely undermines incentives for innovation. Is this a correct presumption? The next section reviews several empirical studies that have examined the consequences of compulsory licensing for innovation.

## II. DOES COMPULSORY LICENSING STIFLE INNOVATION?

Martin Watzinger, Thomas Fackler, Markus Nagler, and Monica Schnitzer conducted a systematic analysis to assess the impact of the 1956 AT&T consent decree on industry innovation. The decree compelled the licensing of a large number of patents in a wide range of patent classes, which allowed the authors to estimate the impact of the decree on future patenting in patent classes that were subjected to compulsory licensing relative to classes in which there was no compulsory licensing. The authors found an increase of about 25 percent in the total number of patents filed in fields affected by compulsory licensing compared to patents filed in fields with no compulsory licensing obligations, most of which was driven by small firms and new entrants. Total innovation, measured by patents filed and citations to filed patents, increased following the 1956 AT&T decree, although the increase did not occur in the telecommunications industry where regulatory barriers protected AT&T from competition.[12]

Other studies have shown that strong patent rights can suppress follow-on innovation, and conversely, that eliminating patent protection can stimulate follow-on innovation. An event that is similar to a zero-royalty compulsory license is a judicial determination that an existing patent is invalid. Alberto Galasso and Mark Schankerman examined how such invalidations affected citations to the extinguished patent, which are a measure of innovations that build on the invalidated patents. They found that, on average, a determination of invalidity increases citations to the invalidated patent by 50 percent. The effects varied by industry and were almost entirely driven by increases in the number of small firms that subsequently cited invalidated patents owned by large firms.[13] These results are consistent with the study of the ramifications from the 1956 AT&T consent decree and suggest that strong patent rights strengthen dominant firms and deter follow-on innovations by small firms and new entrants.

Petra Moser and Allessandra Voena found a similar result in a different context. Congress passed the Trading With The Enemy Act in 1917, which permitted U.S. firms to violate enemy-owned patents if they contributed to the war effort. In 1919 Congress strengthened the Act to effectively confiscate all German-owned patents; in effect, a compulsory license at a zero royalty. These zero-cost compulsory licenses had short-term benefits for U.S. firms and consumers, but they might have reduced incentives for U.S. firms to innovate around the affected German patents. Instead, Moser and Voena found that the number of patents granted to U.S. inventors in technological fields with at least one confiscated German patent increased by an average of about 20 percent relative to patents granted to U.S. inventors in similar fields that did not have confiscated patents, although the increase required several years to achieve its full impact.[14]

What about innovation incentives for the firms that were compelled to license their intellectual property? In a subsequent study of the effects of the Trading With The Enemy Act, Joerg Batena, Nicola Bianchid, and Petra Moser showed that German firms increased their investment in research and development ("R&D") and generated 30 percent more patents after their intellectual property was confiscated.[15] Compulsory licensing appeared to have had a positive effect on innovation by the firms that were compelled to license their patents. Colleen Chien examined the effects of compulsory licensing orders in six merger consent decrees to determine whether the firms that were required to license their intellectual property subsequently reduced their efforts to patent new discoveries. She found no significant reduction in five of the six cases, and noted that the outlier faced uncertainty caused by a delay in finding a divestiture recipient.[16] My own work uncovered other examples of compul-

11 Timothy Bresnahan, "Post-Entry Competition in the Plain Paper Copier Market," 75 Amer. Econ. Rev. 15, 18 (1985).

12 Martin Watzinger, Thomas A. Fackler, Markus Nagler, & Monika Schnitzer, "How Antitrust Enforcement Can Spur Innovation: Bell Labs and the 1956 Consent Decree," (January 2017). CEPR Discussion Paper No. DP11793. Available at SSRN: https://ssrn.com/abstract=2904315.

13 Alberto Galasso & Mark Schankerman, "Patents and Cumulative Innovation: Causal Evidence from the Courts," 130 Qtrly. J. Econ 317 (2014).

14 Petra Moser & Alessandra Voena, "Compulsory Licensing: Evidence from the Trading With The Enemy Act," 102 Amer. Econ. Rev. 396 (2012).

15 Joerg Batena, Nicola Bianchid, & Petra Moser, "Compulsory Licensing and Innovation – Historical Evidence from German Patents After WWI," 126 J. Dev. Econ. 231 (2017).

16 Colleen Chien, "Cheap Drugs at What Price to Innovation: Does the Compulsory Licensing of Pharmaceuticals Hurt Innovation?," 18 Berkeley Tech. L. J. 853 (2003).

sory licensing in merger consent decrees with no significant adverse effects on industry innovation.[17] An earlier study found that firms that were the targets of compulsory licensing in antitrust consent decrees subsequently filed fewer patents but did not reduce their investment in R&D.[18]

Most law and economics scholars, including this author, recognize the benefits from intellectual property rights and would strongly oppose a proposal for widespread compulsory licensing.[19] Frequent interventions to compel the licensing of intellectual property would undermine innovation incentives. Furthermore, compulsory licensing often requires a court or enforcement agency to act as a regulator to determine royalties and other licensing terms and to monitor compliance.[20] Moreover, licensing may not promote competition and follow-on innovation unless it is paired with support to transfer related know-how, which can engender protracted disputes over its cost and the necessary scope, depth, and time-frame for assistance, and can be difficult to administer. An additional objection is that compulsory licensing can harm competition in some situations. Compulsory licensing may allow, or indeed require, firms to share sensitive information that can make it easier for rivals to collude either explicitly or tacitly and may encourage firms to enter into cross-licensing arrangements with other incumbents that raise entry barriers for new competitors.

Reforms such as raising the innovation thresholds for patentability, which would limit the ability to use intellectual property to erect barriers to competition without compensating benefits for innovation, would be superior to compulsory licensing. Absent such reforms, objections to compulsory licensing do not contradict its utility as an occasional remedy for competition concerns, including concerns about monopolization. There is a tradeoff between the benefits from patent protection to incentivize frontier innovations and its costs for follow-on innovations that infringe patented discoveries. There is little evidence of harm from past instances of compulsory licensing and considerable evidence that many of these instances have promoted innovation for products and services that build on the licensed technologies.

## III. COMPULSORY LICENSING FOR THE MODERN ECONOMY

Does compulsory licensing have a role to address concerns about persistent monopoly in the modern economy? Experience from antitrust enforcement against Microsoft demonstrates benefits and costs from compulsory licensing obligations. The 2002 consent decree that settled the U.S. antitrust case against Microsoft had two provisions related to compulsory licensing. Section III.D required Microsoft to disclose certain application programming interfaces ("APIs") that software developers can use to invoke Windows features or functions. Section III.E required Microsoft to license the communications protocols that the Windows client uses to communicate with Windows server operating systems.[21] In 2004 the European Commission ordered Microsoft to offer to potential rivals, with no expiration date, "complete and accurate specifications for the protocols used by Windows workgroup servers in order to provide file, print, and group and user administration services to Windows work group networks"[22] and to license them at reasonable and non-discriminatory terms.[23]

Microsoft complied with the API disclosure obligations and arguably went further by making interface information available for all of its high volume products, such as Office and Exchange, that are called by any other Microsoft product,[24] but plaintiffs objected to insufficient disclosure and costly licensing terms for the communications protocols.[25] Only a few dozen firms signed licenses for the communications protocols and only a handful of the licenses were for workgroup server products. In contrast, open source Linux-based operating systems for web servers and cloud applications found wide acceptance. These products succeeded because they are technically and economically efficient for these

17 Richard J. Gilbert, "Innovation Matters: Competition Policy for the High-Technology Economy," MIT Press (forthcoming), Chapter 7.

18 F.M. Scherer, "The Economic Effects of Compulsory Licensing," New York University Monograph Series in Finance and Economics (1977).

19 Not everyone subscribes to the view that intellectual property rights are necessary to promote innovation. See, e.g. Michele Boldrin & David K. Levine, "Against Intellectual Monopoly," Cambridge University Press (2008).

20 The Supreme Court warned that mandatory dealing (such as compulsory licensing) "requires antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing-a role for which they are ill-suited." *Verizon Communs., Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 406 (2004).

21 *United States v. Microsoft*, Final Judgment, U.S. District Court for the District of Columbia, November 12, 2002 (modified September 7, 2006).

22 Commission of the European Communities, Commission Decision relating to a proceeding under Article 82 of the EC Treaty, Case COMP/C-3/37.792 *Microsoft*, April 21, 2004 at para. 999.

23 *Ibid.* at ¶ 1007.

24 Microsoft Corp., "Microsoft Open Specifications: Interoperability Principles," available at http://www.microsoft.com/openspecifications/en/us/programs/other/interoperability-principles/default.aspx, accessed August 26, 2019.

25 Thousands of technical issues with the disclosures remained unresolved as late as 2010. See "U.S. v. Microsoft, Joint Status Report on Microsoft's Compliance with the Final Judgments, U.S. District Court for the District of Columbia," January 19, 2011.

applications and they can be accessed from any browser using common internet standards.[26] Nonetheless, without the decree and its attendant enforcement, it is possible that Microsoft would have taken steps to frustrate interoperability. David Heiner, writing as Deputy General Counsel at Microsoft, explained Microsoft's decision to support interoperability in part by the desire to attract developers to Microsoft's platform and in part by ongoing competition law scrutiny.[27]

The Microsoft experience suggests a cautionary role for compulsory licensing to address current competition concerns for the digital economy. There is much talk about "big data" as a barrier to entry, particularly for digital platforms such as Google and Facebook and as an input for activities such as artificial intelligence and research and development for new medicines. However, there are many obstacles to the use of compulsory licenses for data to remedy competition concerns.

If enforcers compel firms to share data, they must define the relevant data, ensure that it is delivered in an interoperable format, and specify or provide a mechanism to determine the prices and other terms at which the relevant data is shared.[28] They also must specify the timing and required frequency of updates for shared data. Another issue is a determination of the applications for which shared data may be used. Suppose a competition authority or other regulatory agency concludes that Facebook must share its data to facilitate the entry of other social networks. A licensee might realize an unwarranted windfall by using the shared data for an entirely different application, such as a payments app, for which there is no finding of harm to competition.

Compulsory licensing obligations for data, if deemed appropriate, have to delineate the many parameters that define the sharing obligations and an enforcement agency has to monitor compliance. These tasks may be beyond the competence of a court or antitrust agency and may challenge the capabilities of even a dedicated regulatory authority.[29] Furthermore, compulsory sharing of data can raise critical privacy concerns and can create competitive hazards by facilitating collusion among firms that share similar data sources.

Another sector of the economy that may be considered as a candidate for compulsory licensing is the market for biologic drugs. Biologics are derived from living organisms and, unlike small molecule drugs, cannot be synthesized chemically. They are prescribed to treat serious medical conditions, many of which have no other therapeutic alternatives, including rare genetic disorders, autoimmune diseases, and cancers. And they are expensive, with an average price that can exceed $100,000 per year. Because they are effective and expensive, biologics are the fastest growing segment of drug spending. Seven of the ten drugs with the highest worldwide sales in 2018 were biologics.[30] The top selling drug in 2018, the biologic immunosuppressive Humira (adalimumab), had almost $20 billion in sales.[31]

Congress addressed competition for biologics when it passed the Biologics Price Competition and Innovation Act in 2009. The Act includes provisions for biologics that loosely parallel the Hatch-Waxman Act for small molecule drugs by creating an approval pathway for "follow-on biologics" that are biosimilar to or interchangeable with a pioneer reference drug in return for greater protections, including a 12 year period of data exclusivity for the pioneer drug. The U.S. Food and Drug Administration approved twenty-three biosimilars as of August 2019.[32] Only a handful have been marketed. Most of the remainder have been held up by actual or threatened patent litigation.

Whereas small molecule drugs typically rely on only one or a few patents to prevent generic competition, many biologics have dozens of patents that cover the drug's indications and methods of treatment, formulation, manufacturing processes, packaging, and other characteristics in addition to its basic composition. Many of these patents do not cover fundamental discoveries and others may not be valid or infringed by a biosimilar. Nonetheless, the patents can deter biosimilar competitors because they are costly to challenge and infringement, even if unlikely, would expose the challenger to large damages.

---

26 See, e.g. William H. Page & Sheldon J. Childers, "Measuring Compliance with Compulsory Licensing Remedies in the American Microsoft Case," 76 Antitrust L.J. 239, 256 (2009).

27 David A. Heiner, "Microsoft: A Remedial Success?," 78 Antitrust L. J. 329, 340 (2012).

28 See, e.g. Michael S. Gal & Daniel L. Rubinfeld, "Data Standardization," 94 NYU L. Rev. (forthcoming, 2019).

29 See, e.g. Jacques Crémer, Yves-Alexandre de Montjoye & Heike Schweitzer, "Competition Policy for the Digital Era, Final Report to the European Commission" (2019) at 107. Available at https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf.

30 See Pharmaceutical Technology, "The Top Selling Prescription Drugs by Revenue," May 21, 2019, available at https://www.pharmaceutical-technology.com/features/top-selling-prescription-drugs/, accessed August 31, 2019 and Center for Drug Evaluation and Research, List of Licensed Biological Products, available at https://www.fda.gov/media/89589/download, accessed August 31, 2019.

31 Abbvie 2018 Annual Report, available at https://investors.abbvie.com/annual-report-proxy.

32 U.S. Food and Drug Administration, FDA-Approved Biosimilar Products, available at https://www.fda.gov/drugs/biosimilars/biosimilar-product-information, accessed August 31, 2019.

Humira illustrates the patent barrier to competition. Humira was approved for the treatment of rheumatoid arthritis at the end of 2002.[33] The drug's first patent on its composition expired at the end of 2016, but more than seventy other patents continue to protect Humira from biosimilar competition in the U.S.[34] Europe has a smoother pathway for biosimilar approvals and a patent regime that is less favorable to patent owners. As a consequence, Humira biosimilars are already on the market in Europe, but they are not expected in the U.S. until no earlier than 2023.[35]

Absent patent reforms that would limit protection for minor changes to a drug or its manufacture, compulsory licensing can be a useful tool to promote competition for biologics by allowing biosimilars to benefit from data collected by the pioneer drug and by breaking the patent logjam that protects many biologics from follow-on competition. Compulsory licensing would not expose innovators of biologics to ruinous competition because biologics are very costly to produce, which limits the number of biosimilars that can profitably compete against the reference drug.[36] Yet even small reductions in the prices of these drugs can generate large consumer savings. One study estimated that the failure to market FDA-approved biosimilars for twelve biologics as a consequence of actual and threatened patent litigation cost U.S. patients $4.9 billion in 2018 alone.[37]

Compulsory licensing can be imposed as a remedy for antitrust abuses or regulation could require compulsory licensing at reasonable royalties after the expiration of a biologic's basic patents or a minimum period of exclusivity, whichever is longer. The regulation could include provisions that would allow owners of biologics to obtain exemptions from compulsory licensing if changes to the drug or its manufacture add substantial value or if additional exclusivity is necessary to compensate research and development for new indications.

## IV. CONCLUSIONS

Although antitrust enforcers sometimes compel the licensing of intellectual property as a remedy for mergers and acquisitions, there is a prevailing view that compulsory licensing is not an appropriate remedy for monopolization because the harm to innovation outweighs its benefits. Evidence paints a different picture. Dominant firms that have been compelled to license their intellectual property typically have not ceased to invest in research and development and the licenses often have promoted competition and innovation by firms that build on the licensed technologies.

Compulsory licensing has many limitations and it is inferior to reforms that would make it more difficult for firms to erect barriers to competition by patenting minor inventions or by exploiting a dominant position to amass other intellectual property, such as rights to data. Makan Delrahim, speaking as Deputy Assistant Attorney General in the DOJ, warned that "Before imposing [a compulsory licensing remedy in a unilateral conduct case], we would look for an extraordinary level of market dominance and a demonstrated history of monopolization and resistance to reform. In other words, we would look for a situation where the chief objections to compulsory licenses evaporate, because monitoring the defendant's behavior has *already* been demonstrated to be a problem and the harm to *other* innovation, by *other* competitors, trumps the alleged harm to the defendant's innovation incentives."[38] This is sound advice, but antitrust enforcers should keep compulsory licensing in their tool box to address abuse of market dominance as well as to remedy competition concerns for mergers.

---

33 "Humira Approval History," Drugs.com, available at https://www.drugs.com/history/humira.html, accessed August 31, 2019.

34 Richard Gonzalez, *Abbvie Long-Term Strategy*, October 30, 2015, available at https://investors.abbvie.com/static-files/af79eef2-5901-4b62-9354-982d2d95404e.

35 Peter Loftis & Denise Roland, "By Adding Patents, Drugmaker Keeps Cheaper Humira Copies Out of U.S.," Wall Street Journal, October 16, 2018.

36 FTC, *Drug Product Selection: Staff Report to the Federal Trade Commission*, Bureau of Consumer Protection, January (1979).

37 Biosimilars Council, "Failure to Launch: Patent Abuse Blocks Access to Biosimilars for America's Patients," June 2019.

38 Makan Delrahim, "Forcing Firms To Share the Sandbox: Compulsory Licensing of Intellectual Property Rights and Antitrust," presented at the British Institute of International and Comparative Law London, England, May 10, 2004. (emphasis in original)

# RESTORING ANTITRUST, RESTORING COMPETITION

BY JOHN E. KWOKA[1]

1 John Kwoka is Neal F. Finnegan Distinguished Professor of Economics at Northeastern University.

## I. INTRODUCTION

Twenty years ago, Joel Klein – then the Assistant Attorney General for Antitrust in the U.S. Department of Justice -– declared that "our economy is more competitive today than it has been in a long, long time."[2] Klein credited aggressive antitrust enforcement as well as deregulation and increased international trade for the increase in competition. In the area of antitrust, he pointed to several major price-fixing cases, the *Microsoft* case, and tough scrutiny of mergers in accounting, airline alliances, and other consolidations.

But what Klein did not know – and of course could not have known – is that at the very time he made that assessment, overall competition in the U.S. economy had peaked and started to decline. Study after study has shown that concentration has risen throughout the U.S. economy over the past twenty years. Further evidence shows major declines in new firm start-ups and entry into markets in the U.S., as well as rising and persistent abnormal profits concentrated in the largest companies.[3] All of these trends date back to the 1990s – precisely the time when Klein offered his positive assessment.

Indeed, the very industries he cited serve as illustrations. The number of major U.S. airlines has dropped from 7 to 4, the number of accounting companies from 8 to 4. The telecom and electricity sectors that Klein alluded to as deregulated have undergone massive consolidation. And now there are four new tech giants – Google, Amazon, Apple, and Facebook – instead of just the one he cited. Moreover, over the past twenty years, these five have collectively acquired more than 600 companies.

The totality of this evidence on concentration, declining firm numbers, and rising and persistent abnormal profits leads to only one conclusion: competition in the U.S. economy has been undergoing slow erosion, from precisely the time of Klein's positive assessment. The issues to be discussed here are twofold: to what extent has policy contributed to this problem? And what should be done about it? We address these in turn.

## II. ANTITRUST: FROM SOLUTION TO PROBLEM

If antitrust policy was part of the solution in Klein's time, it has demonstrably been part of the problem since. Merger policy in the U.S. has undergone a profound change, becoming far more permissive since the 1990s, and contributing directly to rising concentration. The evidence for this assessment comes in the form of agency data on enforcement practices over time. For the years 1996-2011, the Federal Trade Commission ("FTC") reported on the total number of merger investigations that it conducted – about 1300 during this period – and of those, how many resulted in any type of enforcement action ("challenges," in the FTC's terminology).[4] I have reworked these data into a form (see Table 1, below) showing the fraction of merger investigations that were challenged according to the number of remaining significant competitors in the relevant market, a measure of concentration defined and determined by the FTC itself.

For the entire period, Table 1, column 1 shows that the fraction of challenged mergers has been systematically greater for those mergers resulting in fewer remaining significant competitors. So, for example, nearly 100 percent of mergers resulting in a single firm – a merger to monopoly – has been challenged, but the challenge rate is lower – about 35 percent – for mergers resulting in five such competitors. This is, of course, what one would expect.

Less expected, perhaps, is how these rates of enforcement have changed over time. The FTC issued four reports during the entire 1996-2011 period, each showing the cumulative totals of investigations and challenges beginning in 1996. Simple calculations reveal the enforcement trend. As shown in the remaining columns of this table, for mergers in the most concentrated markets, the FTC continued over time with a high rate of challenge. For mergers to monopoly, for example, that rate varies within the narrow range of 98 to 100 percent for all periods; and for those resulting in two, three, or four firms, the percent has either stayed steady or even crept up a bit.

But for mergers just below that high level, however, there has been a fundamental policy shift. Between 1996 and 2003 – the first half of that period – the FTC challenged a significant fraction of mergers that resulted in five, six, seven, or eight competitors, mergers that might be described as medium-to-high concentration cases. But, starting in 2004, the agency systematically narrowed its enforcement practice. It ceased challenging any mergers with seven remaining competitors in 2004, any mergers with six in 2006, and those with five in 2008. Thus, by 2008,

2 Joel Klein, "The Importance of Antitrust Enforcement in the New Economy," Department of Justice, January 29, 1998.

3 For a summary of this evidence, see J. Kwoka, "Reviving Merger Control," October 9, 2018, available at https://www.antitrustinstitute.org/wp-content/uploads/2018/10/Kwoka-Reviving-Merger-Control-October-2018.pdf.

4 FTC, Horizontal Merger Investigations Data, 1996-2011. "Challenges" include abandonments of proposed mergers, substantial modifications to satisfy antitrust concerns, and those resolved with remedies.

the agency was literally no longer challenging any mergers that resulted in five or six or seven or more firms, effectively surrendering in the enforcement battle against this entire range of concentrations.

There is other evidence of changing enforcement standards and practice but these data – the agency's own – would seem dispositive. U.S. merger enforcement practice has dramatically narrowed, contributing directly to the rise in concentration in the economy.

## III. RESTORING ANTITRUST

The question raised by this evidence is what needs to be done in order to revive antitrust policy and thereby strengthen competition in the U.S. economy. While there are a number of policy reforms that should be taken, here we will focus on three proposals, as follows.

### *A. Structures and Presumptions*

First, the erosion of merger enforcement needs to be stopped and reversed. As just described, one antitrust agency ceased enforcement against a wide range of mergers starting in the early 2000s. This permissiveness was not the result of new court rulings, new economic findings, or new guidelines, but rather a matter of policy choice by the antitrust agencies. That permissiveness can therefore can be reversed by them. It requires a renewed commitment to the Merger Guidelines as written, a determination to bring (and convince the courts of) all the cases that should be brought, and a level of resources sufficient to this mission.

All of these have recently been lacking and must be restored. The issue of resources deserves further comment. Agency budgets over the past decade have actually declined in real terms, even as the number of filed mergers has risen by more than 75 percent and the costs of investigations have grown substantially. Not surprisingly, therefore, the fraction of mergers that the agencies subject to serious investigation has fallen over time. A straightforward solution to the agencies' resource constraints would be to increase merger filing fees and then to have those fees go directly to the agencies' budgets, in contrast to current practice where fees simply offset congressional appropriations.

A corollary aspect of this problem is the high burden of proof that the agencies face in their investigations and challenges. At present, the agencies analyze essentially every merger for its unique competitive threat, regardless of how high its concentration, regardless of how obvious the competitive problem, and regardless of how difficult it may be to prove the exact mechanism by which harm will occur. This approach is legally unnecessary because the Supreme Court long ago ruled that high-share high-concentration mergers were so inherently likely to be anticompetitive that they could be stopped without "without elaborate proof of market structure, market behavior, and anticompetitive effects."[5] The agencies have not relied sufficiently on this tool handed to them by the judiciary.

Full analysis of each merger is also unnecessary from an economic point of view. since there is now both theory and evidence supporting use of such a presumption. Theory makes clear that a presumption may be superior to full-blown analysis even if it makes some errors, since the policy choice depends also on the error rate of full analysis, together with the costs of each type of error and the incremental cost of full analysis.[6] Taken together, these considerations readily make a case for an appropriately structured presumption.

Other work has suggested that the error rate resulting from a well-chosen presumption would be at worse modest. I have examined the characteristics of all mergers whose outcomes have been analyzed in high-quality economic studies–about 60 in all.[7] I can then calculate the fraction of mergers above various levels of concentration that actually resulted in price increases. For mergers among very few firms – going from three firms to two, for example – all of those mergers in fact are found to result in price increases. But the same is true for mergers resulting in three, four, or five remaining competitors. That is, all of those have been found to be anticompetitive. Indeed, for those with six remaining firms, 80 percent were anticompetitive. And even half of those with seven remaining firms. What this evidence shows is that an appropriately chosen concentration level for a structural presumption – on the order of five remaining competitors – would in fact make few errors as well as saving on enforcement costs.

5 *U.S. v. Philadelphia National Bank,* 374 U.S. 321 (1963).

6 Steven Salop, "The Evolution and Vitality of Merger Presumptions: A Decision-Theoretic Approach," Antitrust Law Journal, 2015.

7 J. Kwoka, "The Structural Presumption and the Safe Harbor in Merger Review: False Positives or Unwarranted Concerns," Antitrust Law Journal, 2017.

There is, in short, good reason for greater reliance on a "structural presumption." It would place the burden of proof squarely on the parties to these high-concentration mergers, relieving the agencies of proving the obvious. And if designed correctly, its error rate would be quite modest, and not obviously greater than that from full-blown analysis.

### *B. The Potential of Potential Competition*

Another important antitrust doctrine that has not been sufficiently utilized by the agencies is "potential competition." This refers to a merger or acquisition by an existing firm of another firm that is not presently producing the same product but is in a position to do so quickly. Since any incumbent firm prices with an eye toward possible entry, a merger or acquisition that eliminates that potential competitor removes that constraint on the existing firm's pricing and other behavior.

This proposition is analogous to the case of a merger between existing firms, which eliminates the threat of competition between the two incumbent firms, and results in enhanced market power. And indeed, there is good empirical evidence that a merger eliminating a threatening potential competitor results in a price increase as well. In the airline industry, for example, a merger between an incumbent and a carrier poised to enter has been found to result in a significantly higher price, although (of course) not as high as for the same merger between incumbents.[8]

Despite the close analogy between actual and potential competition, the legal standard in the U.S. for challenging a merger eliminating a potential competitor involves a higher threshold of proof. Specifically, it requires the agency to show evidence that the outside firm had "in fact tempered oligopolistic behavior" by incumbents.[9] This need for proof of actual past effect is quite different than for mergers between incumbents, and considerably harder to establish. The effect of this high standard has been to sharply limit use of this doctrine. That in turn has permitted numerous mergers and acquisitions that have eliminated potential rivals to major companies, relieving them from the constraints they pose.

One setting where this effect has been evident in the tech sector. As already noted, there have been literally hundreds of acquisitions by Amazon, Apple, Facebook, Google, and Microsoft, most of which have been harmless. In some cases, however, these have swept up smaller firms that might have evolved into more significant competitors to the dominant companies. In the U.S., Facebook's acquisitions of Instagram and WhatsApp have drawn critical attention, as have Google's acquisitions of Doubleclick, YouTube, and ITA, among others.

The key policy question is, of course, not whether in hindsight these mergers and acquisitions have proven anticompetitive, but whether the agencies could – and should – have been able to discern their anticompetitive potential at the time. This is admittedly a much more difficult issue than the conventional case of a potential competitor. In the case of tech companies, the fungibility of technology, the speed and unpredictability of transformation, and the asymmetry of information between the companies and the antitrust agency likely make conventional analysis of potential competition inadequate. A blunter policy instrument is required. This might, at a minimum, involve shifting the burden of proof to the parties to demonstrate the benefits of an acquisition, or redefining the standard to be "possible competition" rather than "potential competition." More aggressively, there may well be grounds to prohibit a wider range of mergers and acquisitions by tech companies, on the grounds of irreversible losses of possible competition.

### *C. Fixing Remedy Policy*

A third major area of merger policy that needs reform concerns remedies. Remedies are an appealing alternative to the polar opposites of banning a merger outright or clearing it in its entirety. They would seem to allow much (or even all) of a merger to proceed, while surgically resolving the specific competitive problems it may pose. Thus, a divestiture remedy may involve the spinoff of only the overlapping operations of two companies that otherwise present no competitive problems by merging. A conduct remedy may prohibit a certain specific anticompetitive behavior by the merged company, which otherwise is competitively benign.

As the use of remedies has increased and evolved, however, concern has grown that they have significant limitations in design and implementation. Many of these arise due to informational and incentive issues. Even the most straightforward remedy – a simple divestiture – requires the agency to examine issues not in its area of special competence. These include the business capability of the buyer, the adequacy of the assets to be divested, and so forth. If these are not examined sufficiently carefully, the remedy may well fail. Conduct remedies are more problematic still, since they seek to prevent the merged firm from engaging in specific, enumerated anticompetitive actions. Unfortunately, such enumeration is almost inevitably incomplete, overtaken by events, or defeated by actions of the parties, which after all have every incentive to

8 For a summary of evidence, see Kwoka, *supra,* note 3.

9 *U.S. v. Marine Bankcorporation*, 418 U.S. 602 (1982).

avoid and evade the constraint. In addition, this type of remedy requires on-going oversight of a regulatory nature by the antitrust agency, a task for which they are not well equipped.

For these reasons, recent research has shown that remedies have not generally been effective in preserving competition. Rather, too often they have allowed price increases similar to what otherwise would have occurred, as research has shown. I have examined the outcomes of about sixty carefully-studied mergers and researched the policy actions by either the FTC or DOJ for each of them.[10] This permits relating agency policies like remedies to the actual outcomes of the mergers. While the numbers of observations are small, the implication is clear: Remedies overall are associated with price increases of 7.3 percent. Divestitures result in slightly lesser increases – 5.6 percent – whereas mergers "resolved" by conduct remedies (though few in number) end up permitting price increases of 13.4 percent.

Based in part on this research, the heads of both U.S. antitrust agencies have now declared their disapproval of the record of merger remedies and taken actions to limit their use. But they remain in use – notably, in the recent Sprint/T-Mobile merger – and too often substitute for what is really required, namely, challenging anticompetitive mergers. Based on past experience and evidence, it seems clear that unless a remedy has a demonstrably high likelihood of succeeding, of thwarting the parties' incentives, and not enmeshing the agency in long-term regulatory action, the appropriate policy response for predictably preserving competition is indeed to challenge such mergers.

For all these reasons, remedy reform is on the short list of actions necessary to reform and revitalize merger control.

## IV. RESTORING COMPETITION

These three reforms – the structural presumption, potential competition, and remedies – would significantly strengthen competition policy in the U.S. Buttressed by additional resources and a few other reforms, these would ultimately strengthen competition itself – an increasingly urgent policy goal.

There is another implication of the above analyses, however, this one involving process rather than substance. Much of what we have learned about the effects of mergers and the effectiveness of policy has been laboriously pieced together by academic researchers, occasionally aided by data from the antitrust agencies. More expansive reporting requirements – by merging firms and also by the agencies – would substantially improve understanding of merger control policy and yield useful insights for how it might be strengthened.

Accordingly, an important reform of merger control practice would be for the agencies to require parties to merger investigations (or at least those subject to remedies or challenge) to provide post-merger data that would allow the agencies to evaluate their past policy choices. Over a period of time, this would result in the creation of a large and comprehensive data set of experiences for the agency, and for outside observers, to analyze. Illustrative of the value of this type of program was the FTC's initiative with respect to hospital mergers. In order to improve enforcement, the FTC conducted retrospectives on several consummated hospital mergers, the findings from which served to significantly strengthen enforcement against subsequent mergers in the health care sector.

In addition, the agencies should be required to publicly provide some information on their own policy decisions so that interested outside observers can examine agency decisions. As one example, the FTC horizontal merger investigations data series has proven informative about its choices and actions. A constructive response would be for the agency to re-examine some of the mergers that it increasingly has cleared in order to see if the outcomes have in fact been as predicted, and certainly to continue to report such data publicly. Unfortunately, instead of taking those actions, the agency has ceased releasing updates at all.

All of these measures – more disclosure of agency enforcement data, more retrospectives on past mergers, and more data production from mergers currently being reviewed and resolved – should be part of a comprehensive reform of merger control policy and practice. Collectively, these would constitute the basis for continuous improvement in merger control and ultimately help restore lost competition in the U.S. economy.

10 Kwoka, *supra*, note 3.

TABLE 1

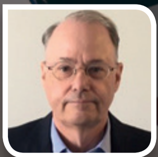
Merger investigations resulting in enforcement actions

| Number of remaining significant competitors | Percent enforced | | | | |
|---|---|---|---|---|---|
| | 1996-2011 | 1996-2003 | 2004-2005 | 2006-2007 | 2008-2011 |
| 1 | 98.0 | 96.2 | 100.0 | 100.0 | 98.4 |
| 2 | 89.2 | 84.8 | 89.3 | 94.7 | 95.7 |
| 3 | 77.3 | 76.1 | 50.0 | 86.7 | 91.9 |
| 4 | 64.1 | 61.5 | 57.1 | 69.2 | 72.7 |
| 5 | 35.2 | 40.6 | 28.6 | 44.4 | 0.0 |
| 6 | 12.0 | 20.0 | 16.7 | 0.0 | 0.0 |
| 7 | 24.0 | 50.0 | 0.0 | 0.0 | 0.0 |
| 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **Total** | **78.6** | **77.0** | **78.7** | **70.8** | **89.0** |

Source: Federal Trade Commission, Horizontal Merger Investigations data, Fiscal Years 1996-2011 (January 2013). available at https://www.ftc.gov/sites/default/files/documents/reports/horizontal-merger-investigation-data-fiscal-years-1996-2011/130104horizontalmergerreport.pdf

# ANTITRUST AND TECH: EUROPE AND THE UNITED STATES DIFFER, AND IT MATTERS

BY GREGORY J. WERDEN & LUKE M. FROEB[1]



1 Mr. Werden recently retired after 42 years with the Antitrust Division of the U.S. Department of Justice. Mr. Froeb is William C. Oehmig Chair of Free Enterprise and Entrepreneurship at Owen Graduate School of Management, Vanderbilt University. Mr. Froeb, but not Mr. Werden, has consulted for the tech industry. Neither author received any funding for this paper, which they initiated on their own.

The European Commission ("EC") and some national competition authorities in Europe have taken on tech giants in high-profile cases, and more cases are in the works. Activists and members of Congress call for action in the United States, although their calls typically are vague about what action should be taken and by whom. Without criticizing any enforcement action, or the inaction of any enforcer, we explore how Europe systemically differs from the United States in ways that affect enforcement against the tech giants.

Our main point is that numerous hard-wired differences between the European and American enforcement regimes make it very difficult for the United States ("U.S.") antitrust enforcement agencies to emulate their European Union ("EU") counterparts. Generally speaking, we do not favor changes to the U.S. regime to eliminate differences, and we do not expect any of the differences to be eliminated, but we leave these policy issues for another day.

This short article describes what we see when we lift the hoods on the antitrust enforcement machines of the U.S. and the EC. We focus on the machinery deployed in a single area of enforcement — what outside the U.S. is called "abuse of dominance," and what inside the U.S. is called "monopolization." But we note that merger and cartel enforcement produce substantially similar outcomes in the U.S. and EC despite structural differences.

We identify ten meaningful differences between the European and American antitrust enforcement systems. In describing each of them, we start by characterizing the European system. Our characterization will be seen by many as overly simplistic, but we aim to capture some essential truth, and we believe that each characterization does so. No one characteristic is decisive, and some might not matter much, but all combine to make cutting-edge enforcement actions against the tech giants likely in the EU under circumstances in which a successful enforcement action would be most unlikely in the U.S.

We do not contend that the EC is targeting U.S. companies. EC enforcement can give that appearance because the tech giants are U.S. companies. The U.S. produces vastly more unicorns than Europe — start-up companies that hit $1 billion in valuation. And a few U.S. tech companies have grown to such proportions that they significantly affect several categories of data for the entire U.S. economy. Nor is our point that the EC has been protecting EU-based companies from competition. As in the EC's case against Intel, the protected company can be a U.S. company.

*The European system is driven by competitor complaints.* A struggling competitor doing business in the EU and bumping up against an arguably dominant rival can seek to improve its prospects by complaining to the EC that its much-larger rival is abusing its position of dominance. Critically, the subject of the complaint need not be dominant in a market the complainant operates in, and we will come back to that. Some work must be done if a complaint is to be taken seriously, so there is a cost, but the market provides the lawyers and economists needed to effectively solicit government action. Casual empiricism suggests that complaining to the EC, although costly, is a good investment. Complaining can pay off in the U.S., but the U.S. antitrust enforcement agencies often leave it to the complainants to bring cases on their own. That has the potential to be a terrific investment because of the treble damages regime the U.S. has had since 1890, but investing in litigation under Section 2 of the Sherman Act is not the attractive investment it once was. For four decades, the courts have been tinkering with substantive and procedural law in ways that have made private monopolization suits more costly yet far less likely to succeed.

*The European system is run by politicians.* A major administrative department of the EC — a Directorate-General — is overseen by a Commissioner. Each of the 28 Member States appoints one, but the assignment of portfolios to Commissioners is within the power of the President of the Commission. Appointees tend to be political allies of the Member States' heads of government, and many Commissioners are career politicians. The Commissioner for Competition is among the most prestigious and powerful posts to which a Commissioner can aspire. Over the last few years, the incumbent has been Margrethe Vestager, a highly skilled politician and former member of the Danish parliament. The ultimate administrative decision-making body in an EC abuse of dominance case is the College of Commissioners, all 28 of these appointees. This decision-making structure seems calculated to elevate politics above technical merit. The Commissioners could not possibly familiarize themselves with the facts of every case, and just reading the proposed decisions would be a slog. Politics sometimes intrudes into U.S. antitrust enforcement, but the U.S. antitrust enforcement agencies most often are run by antitrust professionals.

*The European system was conceived of as regulation, not as law enforcement.* Articles 101 and 102 of the Treaty on the Functioning of the European Union ("TFEU") use the phrase "shall be prohibited," which is legalese for "is prohibited." But that phrase also empowers an administrative agency. The EC, rather than the courts, does the prohibiting in Europe. EC regulation is light handed in many ways. For example, a prohibition decision in an EU abuse of dominance case states that a specific constellation of actions by the target company constitutes an infringement because it produces a certain result. The decision leaves it to the target firm to figure out how to make things right. In contrast, a contested court order in the U.S. contains a series of conduct mandates and prohibitions. Perhaps more fundamentally, conduct suppressing competition is not the only way to run afoul of Article 102 TFEU; an abuse can be "exploitative," e.g. excessive pricing, although such cases are

uncommon. In both the EU and the U.S., it is rightly said that monopoly, without more, is not an offence, but that statement rings hollow in the EU because a monopoly has no right to charge monopoly prices. In the U.S., however, a lawful monopoly is free from any antitrust constraints on exploiting its power, e.g. by charging monopoly prices.

*The European system is grounded in a skepticism of markets.* Antitrust law in Europe was adopted at a time when several EU members had state-owned monopolies and most had a great deal of government control over their economies. The formation of the EU was a major step toward greater reliance on market forces, but it did not go all the way. The EU was created with a regulatory mindset, and its institutions were staffed by people who see their task as intervening in markets to garner greater benefits for consumers. Antitrust in the U.S. has varied over time with respect to the desirable extent of government intervention. A push in the direction of greater executive power created the Federal Trade Commission in 1914. And the 1960s and 1970s were a time of activist antitrust (in both Democratic and Republican administrations). But the prevailing mood for the past four decades has favored restraint. The great idea behind U.S. antitrust law was at the outset, and is now, that competitive markets serve the varied interests of the people, so U.S. antitrust law protects and preserves the competitive process. U.S. antitrust laws do not allow the government to tinker with the market when it might seem to be delivering less than it could, although some other laws do.

*The European system lacks the process of U.S. court proceedings.* EU antitrust enforcement has a lot of process; target companies have rights, which are respected. But these rights are quite different from the rights enjoyed by the targets of antitrust enforcement in the U.S. In some circumstances, Europeans legitimately argue that they protect defendants' rights better than the U.S. does. But in many ways the U.S. protects most what Europe protects least. Remedies and penalties that would be imposed by court order in the U.S. are imposed administratively in the EU, and they are imposed without an adversarial hearing, third-party discovery, or cross examination. This includes fines much greater that have ever been imposed by sentencing judges in U.S. antitrust cases. A right of appeal is granted, and it often is exercised, but conduct must be modified first. Critically, court review is not *de novo* in any sense; the courts do not go back to the raw evidence.

*The European system lacks the burden of proof of an adversarial system.* As a matter of form, the EC has a burden of proof, but that means little because the EC need not satisfy a neutral fact-finder that it has met its burden. The EC decides the meaning and sufficiency of its evidence. Judicial review can overrule the EC on the facts, but it does not take a fresh look to see whether the evidence proves what the EC has found. Most significantly, the courts grant the EC a margin of appreciation on the hard judgment calls, precisely where skeptical U.S. judges scuttle many plaintiffs. Plaintiffs lose a lot more often than they win in the U.S., and once they get past motions to dismiss, any loss results from the failure to carry a burden of proof. As in the Supreme Court's decision in *American Express*, a U.S. court is apt to assign the decisive burden to the plaintiff and to define it in a manner that makes it difficult to satisfy. The result was that American Express is free to engage in conduct known to increase fees paid by merchants. Credit card fees are much lower in Europe, where fees on some transactions have been directly regulated since late 2015, and fees on other transactions were capped earlier this year as a result of EC action under Article 101.

*The European system does not impeach unsound theories.* The U.S. litigation system aims to screen out half-baked and dead wrong ideas at the outset through application of the rules of evidence. For about 70 years, the prevailing test for admissibility of expert opinion in the U.S. was the general acceptance standard of *Frye*. Since 1993 the test has been the reliability standard of *Daubert*. In the Internet Age, reliability screening is all the more important because half-baked and dead wrong ideas are so quickly and widely disseminated. Moreover, expert evidence admitted by a U.S. court is subject to impeachment through cross examination. Nothing appears to screen out unreliable expert opinion at the EC, and nothing appears to prevent unreliable theories from being credited in EC enforcement proceedings. This makes EU enforcement more susceptible than U.S. enforcement to political winds and passing fads.

*The European system maintains a low bar for anticompetitive effects.* While Europeans loudly reject the charge that their system protects competitors rather than competition, they do not meaningfully distinguish between the two in the way they assess anticompetitive effects. Sufficient proof of harm to competition is apt to be is that a competitor lost business or lost opportunities to get business. The contrast to the U.S. system is stark; a plaintiff alleging harm only to itself is apt to have its complaint dismissed for failing to allege antitrust injury. Furthermore, the European courts have held that Article 102 TFEU has no *de minimis* threshold. These decisions were initially read to hold that an immeasurably small impact on the marketplace is sufficient to warrant imposition of a huge fine and a prohibition decision that induces a product redesign or modification in a way of doing business. In any event, no materiality test has yet to be asserted by a European court.

*The European system is receptive to leveraging theories.* Leveraging theories are variations on the theme of extending monopoly from one market into an adjacent market. In the U.S., such theories are legally cognizable only when monopoly is actually threatened in the second market. It is sufficient in Europe that competition is "distorted" in the second market. Whenever a tech giant seeks to monetize a platform by offering a related service, it can easily be found in violation of Article 102 TFEU because its dominant platform is seen to treat its own related business more favorably than it treats an independent business competing with its related business. The EU, thus, discourages efficient vertical integration.

*The European system does not recognize competition on the merits.* As a concept, competition on the merits has had a central place in EU jurisprudence because it has provided the theoretical benchmark for defining abusive conduct. But references to competition on the merits appear to have been a rhetorical device. Neither the EU courts nor the EC has ever declared any particular category of conduct to be competition on the merits — not even introducing a new product. Product improvement is perhaps the area in which recognizing competition on the merits matters most. In the U.S., courts hold that any genuine product improvement is lawful competition on the merits, but the EU does not subscribe to that view. While the U.S. errs on the side of caution when the conduct at issue provides tangible immediate consumer benefits, the EC is more confident in the accuracy of its judgment and evidences little fear of chilling legitimate competition from which consumers benefit.

These ten points of contrast between Europe and the U.S. do not guarantee different outcomes, but they do make different outcomes easy to understand. EC officials have not been inhibited in doing what they think best, but U.S. officials have been, and they will continue to be inhibited, even if they have a strong desire to act and a sound basis for action. Moreover, EC officials are inhibited, to some extent, if they desire to do nothing. The failure of the EC to act in a competition case must be explained in a published decision, which can be challenged by a third party. U.S. enforcers have no obligation to explain or defend inaction, except in congressional oversight hearings.

Since the 1990s, a major concern has been whether antitrust enforcement in the tech space is too slow to do much good, and this concern has merit. Several other points of contrast between the EU and the U.S. cause the impact of delay to differ between the U.S. and EU. From start to finish, a big case in the EU is likely much longer than a big case in the U.S., but remedial action is more front loaded. The EU approach has both upsides and downsides.

EC-style due process can take considerable time. For example, the EC started investigating Google in late 2010 but did not issue the shopping decision until mid-2017. Subsequent Google investigations have been shorter, but still took about three years. Major investigations by the U.S. antitrust enforcement agencies of the tech giants are reputed to be underway now, and past history suggests filing cases before the 2020 elections will be difficult. Of course, litigation of such cases to judgment would take years.

The court litigation that follows an EC antitrust decision takes even longer than U.S. antitrust litigation. The EC decision against Intel was announced in 2009. In 2014, the General Court upheld the decision without examining the EC's assessment of the actual exclusionary impact of the impugned conduct. In 2017, the Court of Justice of the European Union ruled that the General Court should have examined the EC's assessment of exclusionary effect, and sent the case back. There is no end in sight for the litigation. The ultimate decision could materially change the law, and Intel might even win. But Intel has had to comply with the EC's decision for the past decade.

Lengthy court proceedings nearly always preceded imposition of a contested remedy in the U.S. The U.S. case against Microsoft holds the speed record for the trial in a big antitrust case. It was filed in May 1998, and Judge Jackson issued his remedy opinion in June 2000. But Microsoft did not have to begin compliance pending appeal, and the appeals court rejected the remedy Judge Jackson crafted. On remand, the parties were pushed to compromise. Judge Kollar-Kotelly approved what they had come up with in November 2002, and the appeals court upheld her ruling in June 2004.

Another feature of European due process can cause remedies to make little sense when cases move slowly. A central feature of EC procedure is the statement of objections ("SO"). To protect the rights of target companies, EU law requires that they be served with a confidential SO detailing the EC's concerns and the factual basis for them. An SO can be superseded, but a final SO fixes the facts on which the case proceeds, no matter how long it takes. In the EU case against Microsoft, key facts about media players were hopelessly out of date when Microsoft complied with the EC's decision by offering a version of Windows without the Windows Media Player. That the key facts were no longer true was irrelevant in subsequent court proceedings.

The U.S. system has due process similarities to the European system, but the facts are not fixed as of the complaint; rather they are fixed as of the time of trial or the close of discovery. And most critically, the facts are fixed only for purposes of liability. Liability and remedy typically are closely connected in the U.S., and separate proceedings on remedy are atypical, but the imposition of remedy is a distinct judicial function in the U.S., governed by principles of equity adopted from English common law. In theory, and sometimes in practice, the court assesses the situation anew before ruling on remedy. If circumstances have materially changed from those of the liability determination, the changed circumstance are taken into account, which can have a profound effect on remedy.

One final note — one final point of contrast — is that judges in the U.S. were persuaded by Robert Bork that antitrust was unworkable without a single focus, which Bork called consumer welfare. Bork argued that antitrust was not enacted to address the myriad social issues that judges had invoked in their decisions, and at least that much of Bork's argument has persuaded judges. This matters in the tech space because the cries for action invoke myriad social issues. The tech giants might raise a variety of legitimate social concerns, but only competition concerns are within the domain of antitrust.

# VERTICAL MEDIA MERGERS: AN ANATOMY OF TWO CASES IN PORTUGAL

BY ANA SOFIA RODRIGUES[1]

1 Ana Sofia Rodrigues is the Chief Economist and the Director of the Studies and Market Monitoring Bureau of the Portuguese Competition Authority. The views expressed in this article are of the sole responsibility of the author and do necessarily represent those of the Portuguese Competition Authority.

# I. INTRODUCTION

Vertical mergers have taken the spotlight in recent years. Vertical mergers may entail efficiencies, such as the elimination of double marginalization. However, economic theory has extensively shown that these deals may also raise competition concerns and bring about price increases or deterioration of quality through foreclosure and/or coordinated effects.

This renewed interest of the competition community in vertical mergers has been prompted by certain vertical deals in recent years. Interestingly, some of these deals were in the media sector.

In 2018, the stakes rose in the U.S. with the AT&T/Time Warner deal, the first litigated vertical merger in over four decades. The DOJ challenged the merger on the basis of a raising rivals' costs theory of harm.[2] However, the concerns raised by the DOJ were dismissed by the District Court,[3] with Judge Leon's notorious ruling.[4] The judgment was affirmed by the Appeals Court in February 2019, on the basis that "*the government's objections that the district court misunderstood and misapplied economic principles and clearly erred in rejecting the quantitative model are unpersuasive.*"[5]

In the midst of this surge of interest in vertical mergers, some have flagged this as a traditionally neglected area of merger control, in particular in the U.S., blaming the excessive influence of Chicago School presumptions. Others have called for a strengthened role for empirical analysis in vertical merger decisions.

More recently, just last September, at the Fordham Competition Law Institute conference, U.S. FTC Chairman Simons stated that "*anti-competitive vertical mergers are not unicorns, and there should not be a presumption that all vertical mergers are benign.*"[6] The need for reinvigorated vertical merger enforcement and the review of decades old U.S. vertical merger guidelines have been called for by some prominent economists, most notably by Steven Salop.[7] Yet it is still to be seen whether the U.S. vertical merger guidelines will indeed be revisited.

I would highlight two key aspects that trigger skepticism in both judicial decisions regarding the case brought by the DOJ against the AT&T/Time Warner deal. One is the use of a bargaining model as a framework to assess the outcomes of negotiations between content producers and pay-tv providers. The other is, the role of, as both judgements put it, "*real world data*" in the analysis.

This article explores these two aspects, as well as the potential of vertical media mergers to generate coordinated effects, in light of two cases analyzed by the Portuguese Competition Authority (the Autoridade da Concorrência, "AdC").

In Portugal, there have been two high profile media merger attempts: the *Altice/Media Capital* deal, announced in 2017, and the *Sport TV* merger, in 2013. In both cases, the mergers failed to obtain a green light from the AdC. The *Altice/Media Capital* merger was withdrawn by the merging parties in June 2018, following the statement of objections issued by the AdC. The *Sport TV* merger was blocked by the AdC in July 2014.

In the *Altice/Media Capital* merger, the main concern was input foreclosure. In the *Sport TV* case, the main theories of harm were customer foreclosure and coordinated effects. The two cases are thus wide-ranging in terms of the competition concerns that may emerge in vertical (media) mergers. They furthermore provide interesting grounds for a discussion on the role of empirical data used to assess vertical (media) mergers.

In Section 2, I briefly describe the competition concerns identified in the *Altice/Media Capital* merger, highlighting the role of empirical data in assessing potential harm. In Section 3, I describe the *Sport TV* merger and the analysis undertaken in this case, focusing on the coordinated effects theory of harm. Section 4 concludes with some final remarks.

---

2 See the Note prepared for the OECD Competition Roundtable on vertical mergers in the technology, media and telecom sector by Carl Shapiro, who testified in Court on behalf of the DOJ in the AT&T Time Warner merger, available at https://one.oecd.org/document/DAF/COMP/WD(2019)75/en/pdf.

3 *United States v. AT&T, Inc.*, 310 F. Supp. 3d 161 (D.D.C. 2018).

4 See the Note by the U.S. to the OECD Competition Roundtable on vertical mergers in the technology, media and telecom sector, available at https://one.oecd.org/document/DAF/COMP/WD(2019)59/en/pdf.

5 *United States v. AT&T, Inc.*, 916 F.3d 1029 (D.C. Cir.2019).

6 See "FTC Announces Recommendations for SAFE WEB Act Renewal", National Law Review, September 15, 2019, available at https://www.natlawreview.com/article/ftc-announces-recommendations-safe-web-act-renewal.

7 See Salop, S. & Culley, D. (2016), "Revising the U.S. Vertical Merger Guidelines: Policy Issues and an Interim Guide for Practitioners", Journal of Antitrust Enforcement, Vol. 4(1) and Salop, S. (2018), "Invigorating Vertical Merger Enforcement", The Yale Law Journal, Vol. 127(7).

## II. EMPIRICAL DATA IN THE *ALTICE/MEDIA* CAPITAL MERGER

In the summer of 2018, following an in-depth investigation, the AdC raised competition concerns regarding a merger whereby MEO, a wholly-owned subsidiary of Altice and the former incumbent, active in all segments of electronic communication services, was acquiring Media Capital, the main media and content company in Portugal.[8]

In 2016, MEO accounted for almost 40 percent of all pay-tv subscribers in Portugal. Media Capital produces widely viewed Portuguese-speaking TV channels and radio stations. The main dimension of the merger was thus vertical.

A key aspect of the analysis related to the relevance of the channels being acquired by MEO. The target firm's channels represented a quarter of average daily share view of all TV channels distributed in Portugal. The programs broadcast on these channels were consistently ranked in the top 10 most viewed programs in Portugal. Excluding football matches, they ranked as the top 6 most-viewed programs. These channels were also highly relevant for advertising, accounting for about 40 to 50 percent of all TV advertising revenues in Portugal in 2016.

The main theory of harm was the risk of input foreclosure. In order to assess this theory of harm, the AdC first analyzed the ability and the incentives of the merged entity to actually withhold key content from MEO's rivals, i.e. total input foreclosure.

In terms of empirical data used to develop the analysis in the case, among the several components of the analysis, I would highlight two key elements, namely consumer departure rates in the face of a foreclosure scenario; and diversion rates, that identify the providers to which departing consumers are likely to switch. The more accurate the estimates for these crucial elements, the more robust the results of the foreclosure analysis.

In carrying out this assessment, the AdC sought to collect data that would provide accurate estimates for these components. In order to estimate the first element, the departure rates, the AdC undertook, in Phase II of the investigation, a consumer survey with 1,550 interviews of households in order to assess how consumers would react if those channels were removed from their current provider's line-up.[9]

To estimate the second element, the diversion rates, the AdC collected data from past diversion rates between telecommunications companies, as indicated by number portability data. As triple and quadruple play bundles account for a large share of pay-tv subscribers, these numbers provide good estimates for the providers to which consumers are likely to switch in the event of foreclosure. This is a significant upgrade in robustness vis-à-vis using the market shares of the various providers as proxies for diversion ratios (which is the default option when better data are not available).

As a result, computations of pay-offs in the different scenarios were developed using "real world data" proxies for their key determinants.

In the survey, consumers were faced with a number of scenarios in which Media Capital's channels were no longer available on MEO's competitors' offerings. They were given options ranked 0 to 10 in a closed form answer, ranging from "No, I would definitely not change provider" (0) to "Yes, I would definitely change provider" (10). Intermediate options showed less determined intentions on switching. When computing departure rates, only the answers ranked 10 in the intention of switching were considered, thus excluding all other answers signaling potential switching, namely those ranked 6 to 9.

In addition, the possibility of a reduction in the price of the offer of MEO's competitors in the foreclosure scenario due to the lower quality of their bundle was considered. For this, the survey also included questions to consumers on whether they would switch if the price of the offer of their current provider would decrease. Several price reductions were included in the survey. The highest corresponded to a reduction of around 20 percent in the price of the bundle.

Furthermore, in the calculations, it was assumed that subscribers switching to MEO generate a margin equal to MEO's average contribution margin per subscriber per service, and that consumers would maintain the same type of bundle when switching.

8 For a more detailed description on the case, please see the article prepared by the economists that integrated the case-team, Codinha A., M. Costa, M. Ribeiro & P Marques (2018). "*Input foreclosure in telecoms/media vertical Mergers: the MEO/GMC case*", Antitrust Chronicle, August, Vol 2.

9 Several scenarios were considered as to the channels being foreclosed and the competitors to which access to the channels was denied. This article abstracts from detailing these several scenarios.

Vertical arithmetic, based, amongst other elements, on departure rates from the survey and diversion rates from telecommunications companies' historical data, together with profit margins, showed that the merged entity would find it profitable to engage in total input foreclosure. Estimated gains in profits in pay-tv provision more than compensated for losses in revenues from advertising and customer interaction services and carriage fees.

Once the capacity and incentives for total input foreclosure were established, the AdC assessed the possibility of partial input foreclosure, whereby the merged entity would supply the channels to MEO's rivals, but at higher carriage fees. In this analysis, the AdC used a Nash bargaining framework identical to that used by the European Commission in the *Liberty Global/Corelio/W&W/De Vijver Media* merger and by the U.S. FCC in its investigation of the *Comcast/NBCU* merger. The AdC concluded that the merger strengthened Media Capital's bargaining position in negotiations with MEO's rivals over carriage fees. The application of the bargaining model also showed that post-merger, Media Capital and MEO's rivals would always have an incentive to reach an agreement. However, it also predicted several-fold increases in carriage fees, substantially raising MEO's rivals' costs and softening competition downstream.

The AdC's approach in the *Altice/Media* Capital, namely through customer surveys for estimating departure rates, accounting for the possibility of adjustments in the prices of rivals' offers and their impact on switching, and building on historical data and number portability data to estimate diversion ratios adds robustness to its conclusions. This is an important element in effectively assessing harm from a vertical merger. The fact that the theory of harm was confirmed even under the most conservative hypotheses gave further strength and soundness to the competition concerns identified.

## III. THE *SPORT TV* MERGER – COORDINATED EFFECTS IN A VERTICAL MEDIA MERGER

In July 2014, the AdC blocked a vertical media merger, as a result of competition concerns with foreclosure and coordinated effects. Through this merger, PT (MEO)[10] was entering into an existing joint venture, Sport TV. Sport TV was the longstanding monopolist supplier of premium sport channels, until a competitor, Benfica TV, entered the market a few months prior to the merger.

Pre-merger, Sport TV was a 50/50 joint venture between MEO's main competitor, ZON Optimus ("ZON") and a third party (Controlinveste). Post-merger, these two neck-to-neck competitors would each hold a 25 percent share of Sport TV and share control over the joint venture, together with Controlinveste.

At the time of the merger, ZON and PT (MEO) supplied roughly 50 and 40 percent of pay TV subscribers, respectively. The customer foreclosure concerns followed from the fact that, pre-merger, non-vertically integrated pay-tv providers represented 50 percent of the market. As a result, in the absence of the merger, non-vertically integrated pay-tv providers could likely weaken the ability of ZON to block the entry of competitors to Sport TV. However, post-merger, vertically integrated pay-tv suppliers would account for 90 percent of the market, thus raising concerns as to the ability of Sport TV´s shareholders to foreclose rival premium sports channels' access to their platforms. Additionally, as result of the merger, the role of PT (MEO) as a potential promotor of the entry/expansion of premium sports channels would be eliminated. The timing of the merger in what regards market developments in premium sports channels is worth noting: it followed the recent entry of the first competitor to Sport TV – Benfica TV.

On coordinated effects, again, the particular circumstances in the market at the time, in terms of the downstream market of provision of pay-tv services, were also important. The market had evolved from a quasi-monopoly to a quasi-duopoly – of PT (MEO) and ZON (NOS) – in the 5 years prior to the merger. The market structure was thus more prone than ever to coordinated behavior.

Furthermore, the merger created structural links between the two main rival telecommunications companies, increased symmetry in terms of vertical integration, reduced the scope and incentives for differentiation via premium sports content, strengthened and harmonized the degree of information of PT (MEO) and ZON concerning their rivals, harmonized cost structures, increased transparency by creating privileged fora for information exchange, and strengthened barriers to entry as a result of vertical foreclosure effects. In addition to customer foreclosure concerns, input foreclosure was already a concern pre-merger. [11] These vertical concerns fed into the coordinated theory of harm, as they could be instrumental in ensuring the external stability of a coordination mechanism led by PT(MEO) and ZON.

10 PT was the predecessor company of Altice MEO.

11 There was a decision by the AdC, in June 2013, fining Sport-TV for price discrimination in the provision of the channel Sport TV to different pay-tv providers.

Additionally, the merger would eliminate a relevant source of rivalry and contention between the two main rival telecommunications companies – access to premium sports content. Content, and premium sports content in particular, seem to play an important role in terms of the competitive interaction and rivalry between telecom operators.

As a result, the AdC concluded that the merger would strengthen both the internal and the external stability of a potential collusive mechanism, in a market that was already vulnerable to collusion.

The merging parties put forward a remedies package that was not accepted by the AdC. The remedies were behavioral in nature and can be generally described as provisions envisaging: "Must carry" – rival channels on merging parties' platform; "Must offer" – through a Regulated Offer – regarding the merging parties' channels to the rival pay-tv platforms; and Chinese walls to prevent information sharing between Sport TV and its shareholders, aimed at preventing exchange of sensitive commercial information. The AdC found that the remedies package was poorly specified, vague and allowed too much discretion to the merged entity, posed a high risk of circumvention, could not be effectively monitored, and was likely to create distortions in the market.

## IV. DISCUSSION AND FINAL REMARKS

Recent years have seen important developments regarding vertical (media) mergers. The competition policy and academic communities have thoroughly discussed this topic. High profile deals have been assessed and decisions rendered. Such opportunities to reshuffle arguments, revisit presumptions and, more generally, rethink merger enforcement, are important to ensure that it is up to standard in protecting competition and consumer welfare.

The use of bargaining models in this type of assessment has been the subject of much discussion following Judge Leon's ruling in the *AT&T/Time Warner*.[12] In the ruling, these models were considered unfit for the purpose of capturing complex negotiations and compared to "Kabuki Dances" and "Rube Goldberg Machines."

Bargaining models, however, try to capture precisely the environment in which negotiations take place. These models systematize the relevant elements that determine the outcome of a business negotiation. It is thus a robust, theoretically established approximation to determine what is likely to influence the bargaining power of each party in a negotiation. How much each side has to gain/lose for achieving/failing to reach an agreement is intuitively expected to influence the outcome in terms of division of gains, or bargaining surplus, between two sides at a negotiation table. The intuitiveness of the bargaining framework is well illustrated in the example developed in Baker (2011)[13] regarding the negotiations between a prospective seller and buyer for the sale of a house.

It seems, thus, fair to say that these concepts are intuitive and familiar to businesspeople that engage in actual negotiations. As a result, it is puzzling that the use of a framework that is designed precisely to replicate business environments, that is grounded in intuitive concepts, and that is well established in economic theory, is questioned. Neglecting this instrument would weaken the accuracy of vertical merger assessment unnecessarily, and widen the gap between the analysis and the determinants of "real world" negotiations.

Furthermore, the robustness of the conclusions drawn from an analysis relying on both foreclosure profitability arithmetic and a Nash bargaining model depends, to a great extent, on the accuracy of the estimates used for the key determinants of the relevant payoffs. This element was key in the competitive assessment of the *Altice/Media Capital* merger by the AdC.

It is however important to highlight that empirical analysis has (at least) a dual role to play in this debate. Not only should it inform the estimates plugged into the theoretical models that have been developed to assess foreclosure concerns, but it can assist in assessing the decisions on vertical mergers.

Recent vertical media mergers have led to different decisions and outcomes, with some having been implemented, others having failed to obtain (conditional or unconditional) clearance, and others having gone ahead subject to a set of remedies. *Ex-post* analysis of the impact of these merger decisions is warranted, and could shed light on the debate.

---

12 See Caffarra, C., G. Crawford & H. Weeds (2018). "*Kabuki Dances or Rube Goldberg Machines? Vertical Analyses of Media Mergers*". Antitrust Chronicle, August, Vol 2.

13 Baker, J. (2011). "*Comcast/NBCU: The FCC Provides a Roadmap for Vertical Merger Analysis*", Antitrust, Vol. 25, No. 2, Spring 2011.

# BUSINESS MODELS, INCENTIVES, AND THEORIES OF HARM

BY CRISTINA CAFFARRA[1]

1 Head of European Competition at Charles River Associates. The paper is written in a personal capacity and does not reflect the views of CRA or anyone else at CRA. For disclosure, I have advised multiple players in the digital space, including parties adverse to Google in the *Android* investigation and in other matters. I have also advised Apple, Amazon, Microsoft, Uber, Newscorp as well as others. A longer version of this piece appeared in the special August issue of *Concurrences*.

# I. INTRODUCTION

The temperature of the debate on "what to do about tech giants" has risen in the U.S. by several notches following recent House hearings, leading to expansive requests for information to Google, Facebook, Amazon, and Apple; as well as news that a large collective of individual U.S. States are pursuing major investigations in their own right (the federal agencies are also reportedly investigating Google, Facebook, and Amazon, though, given their record, this has not been met with much excitement). Meanwhile the mainstream traditional U.S. "antitrust elite" remains skeptical about the potential for more antitrust enforcement ("the law needs rewriting," "the courts do not have the tools," "you cannot solve all things with antitrust") and is holding on to the original *Microsoft* case[2] as the pinnacle of achievement (twenty years ago, but nothing has happened since). There is an incipient discussion of regulation of conduct in digital markets, but it is very nascent. Europe is further along, as it has been less reluctant to pursue actual cases (as well as lead in the production of reports and recommendations for how to deal with digital) – both at the European Commission ("EC") and individual Member State levels. European regulators seem less shackled than their U.S. counterparts, as there is general recognition that – as well as thinking about "smart *ex ante* regulation" – we can and should be more creative in our use of antitrust tools. Unprecedented phenomena require unprecedented thinking.

This paper argues that while regulation and codes of conduct have a role to play (essentially in my view in the use of data, and in defining rules for "fair" terms and conditions when dealing with counterparties in a position of economic dependence), we should use the antitrust toolkit more expansively and aggressively, to pursue a wider catalogue of potential harms, including looking at concerns on a preliminary basis (and where the conduct may undermine in the short term the survival of small dependent counterparties, being willing to use interim measures). It is not all about *ex ante* regulation, or "breaking them up."

The economic models we use need to be extended to the digital environment and reformulated in the language of platforms, but work is underway (e.g. extending models of exclusionary tying to "free" environments with a "zero price constraint" in Android[3]) and should eventually provide a body of work to be relied upon when articulating and testing theories of harm.

Further, in developing theories of harm that "fit" the conduct, we need to be clear about how different "digital platforms" differ profoundly in terms of certain key characteristics. There is no such thing as a "problem with the GAFAMs," "the FANGs," "the FAAMGs," or whichever collective acronym one might want to use: differences in business models and monetization strategies matter to the priors we want to investigate. Further, business models are evolving and this may modify incentives as time goes by – so that conduct may become problematic even when initial incentives were more benign. We need to understand this in order to craft theories of harm that make sense.

# II. BUSINESS MODELS "MAP INTO" INCENTIVES FOR CONDUCT

"Digital platforms" (GAFAM, FANG, etc.) are a very heterogeneous collection of business models, encompassing internet businesses offering free services to users and monetizing them either only (or primarily) through the sale of advertising (most obviously Google and Facebook); "transaction" or "match making" businesses that intermediate between two or more sides and "take a cut" when a deal is struck (e.g. Uber, Deliveroo); open marketplaces where sellers can find customers, and "take a cut" again when a transaction is struck (e.g. online retailing like Amazon, eBay); and "true platforms" – like cloud businesses and app stores – which provide a service on top of which other businesses can be built, and monetize in different ways. Business models and monetization strategies fundamentally matter for understanding incentives and conduct. They are not a sufficient criterion to identify concerns in an antitrust context, but help to rationalize how a particular form of conduct needs to be assessed. None of this is intended to provide a taxonomy of "good/bad" behavior, but "where the money is made" drives the questions we need to ask, and the direction in which economic analysis needs to be developed.

### *A. Advertising-funded Models*

The "zero price" model on the user side – which is key to developing a user base rapidly and relies almost exclusively on advertising for monetization – has multiple potentially problematic implications (several of which were examined and confirmed by recent antitrust investigations across Europe):

.

2 *United States v. Microsoft*, 253 F.3d 34, D.C. Circuit, 1998.

3 See Etro, F. & Caffarra, C., "On the economics of the Android case," *European Competition Journal* 2018. See also Choi, J.P., & Jeon, D.S, "A leverage theory of tying in two-sided markets," 2016. Mimeo. De Cornière, A., & Taylor, G., "Upstream Bundling and Leverage of Market Power," 2017. Mimeo. Toulouse School of Economics 2018.

- It can introduce a barrier to entry: it is just not possible in a zero-price environment for a new entrant to compete at a lower price point while making the necessary investments and going through the required "learning by doing" to compete on quality. The loss of price as a lever of competition can increase the persistence of market power;

- It creates incentives to hoard user data, exploit data without consent, lower privacy standards and preserve privileged access to data through walled gardens and practices that provide limited/asymmetric access to complementary businesses which contributed to generating the data;

- It makes it important to avoid the user base leaking away to businesses which are currently relying on being "found" (i.e. are complements) but could in time challenge their position and become substitutes.

- It can create strong drivers to develop and exploit power in the sale of digital advertising. To the extent that monetization indeed takes place through advertising, there are powerful incentives to gain control of progressive stages of the ad-tech stack – controlling each level and foreclosing rivals while extracting all the value as intermediaries from the supply and demand side.

- It can produce incentives to colonize adjacent markets and pre-empt the growth of rivals in those markets (for instance, "verticals" in search) which could then expand into a challenge in the primary market (for instance, general search).

- And as suppliers become more dependent on the "aggregator" to access users, the latter can also impose increasingly controversial / exploitative terms designed to favor itself.

While this does not imply foregone conclusions, it does mean that super-dominant internet firms which monetize essentially through advertising ("super aggregators") have strong incentives to behave in ways that are potentially problematic for all these reasons.

### *B. "Platform" Models*

Not all internet businesses are "platforms." Proper "platforms" essentially provide environments on which third parties can build their business and expand. They monetize in ways other than advertising (a price for service or a commission on sales). Platform power tends to come from controlling the economics of the ecosystems, and in various cases intermediating the relationship between suppliers on the platform, and their customers.

At one end one could place Microsoft's Azure cloud business, which is a "real" platform: it monetizes by charging enterprise users for its services, and has no known economies of scope in data, because it is not the controller of the data it processes. Indeed, data security and control are key to the business model, as the cloud provider is constrained in its access and use of the data as a condition of business by the customer.

Apple's App Store is also a platform, with Apple providing intermediation between app developers and users. To the extent that Apple is a hardware provider, making money mostly on hardware, it benefits from attractive complements to that hardware (apps) that make the device more appealing to users. Certain developers have argued for some time that the "commission" Apple charges in some cases (e.g. for digital subscriptions entered into through the App Store) is "too high" (though Apple has defended this as a legitimate way to recoup its significant investment in the store through a "finder's fee" for iPhone customers with high willingness to pay). Questions have started to arise (e.g. with the recent Spotify complaint) around whether Apple's incentives will change in future as it may transition in part away from a hardware seller with a complementary app store, towards more of a service business in its own right, developing its own competing services in areas such as music, payments, TV, gaming, and others.

The business motivation for expanding Apple's own presence in services may well be an effort to differentiate its ecosystem in an increasingly commoditized world in which its App Store is no longer unique (but challenged by Google Play and equivalents like WeChat in China, for instance). However, a material growth in Apple's own presence in services could make more plausible the question of whether the benefit to Apple of having a diverse offering with third-party apps that attract users would be mitigated by the opportunity to favor its own services in the same space–. If device growth were indeed to slow down, and monetization were to occur much more significantly in the future through services rather than devices, then one can see how the question could plausibly be raised about whether Apple would have incentives to profitably replace third-party apps in years ahead (this would be akin to a "dynamic leveraging" scenario, in which a platform may want to exclude complements which it perceives as substitutes to its services in the future). How plausible these stories would be will really depend on how demand and technology unfold.

Amazon is an e-commerce platform (a "marketplace") on which third party sellers can find buyers, but also has a "first party" business through which it sells branded and own-branded products – i.e. it is integrated. It has also developed a major network of warehouses and distribution centers ("Fulfillment by Amazon," or "FBA") which is offered to merchants as an alternative to third-party logistics services. On the consumer side, it has introduced a subscription service ("Prime") which offers faster delivery and over time has been expanded to include services such as music and video streaming. Multiple concerns are expressed around Amazon's business model:

- One has focused on the extent to which Amazon's size and economies of scale and scope in distribution have undermined the traditional retail sector (Lina Khan has described this as a form of "predation"), with the narrative also extending to a vision that once Amazon becomes fully entrenched as the go-to platform for online purchases, it will shift from its current customer-centric focus towards "cashing in" – increasing Prime fees, degrading shipping terms, raising retail prices.

- Concerns have been raised around the sheer "power" that Amazon can wield, because of its size and "must have" nature as an outlet, over vendors and small merchants that "depend" on it for visibility and access to consumers. The commission Amazon charges on sales is described as the "Amazon tax," and there are multiple claims of power being exercised over small merchants in the form of unfair terms and conditions ("T&Cs"), charges and requests. The German (and Austrian) antitrust investigations into Amazon, recently settled, focused on this and ended with commitments to modify certain problematic T&Cs worldwide.

- A major focus of public discourse has been the "dual role" concern: that Amazon is acting simultaneously as the platform operator for the marketplace, and as a seller on its own account, and that this generates incentives to "favor itself" and squeeze the merchants or exploit them in various ways. Analogies are also made with a Google Shopping-type mechanism, whereby the ranking of Amazon's search results on its results pages is biased by its algorithm to favor its own products, or favor merchants that make use of Amazon's FBA or Prime services.

As a matter of first principles, it does not seem problematic for a marketplace operator to be charging a commission on sales (and indeed it is common to others, such as eBay). A marketplace also benefits from the widest possible variety of products being available for sale – and being recognized therefore as the "everything store," Selling own-label products in competition with merchants does not automatically create an incentive to exclude or marginalize them. But while we have traversed similar issues in multiple other contexts (from bricks-and-mortar grocery retailing to broadcasting, where we have considered and modelled the circumstances in which an integrated supplier may want to favor its own content over others), what needs to be worked on is the extent to which these results carry through in an environment with much larger economies of scale and scope, and huge volumes of data.

The "data" piece indeed complicates the analysis significantly: there is uncertainty on the extent to which Amazon is using the data it obtains on sales by third-party sellers (Amazon says it does not), as well as unique data on what products consumers have searched for ("consideration data"), to make business decisions that may benefit itself (and disadvantage third party sellers) – for instance, determining whether it should enter with an Amazon retail offer for a product already supplied by a third-party seller. The concern commonly expressed is that Amazon can match and replicate third-party offers at lower prices – pre-empting sellers and "appropriating" their investment in product innovation. This is indeed a focus of the current investigation by the EC. And to complicate matters further, Amazon is growing its advertising business (estimates place it at around one half of Facebook's U.S. advertising business). While the issues that attach to entirely ad-funded businesses may be some way down the road, concerns have thus been expressed that Amazon might be transmogrifying rapidly into an ad-funded business. The intersection of the business model (huge economies of scale and scope, use of complementary offers to drive users to the service in various ways), combined with major economies of scope in data use will invite significant and complicated scrutiny of Amazon for some time.

Overall, the insight from this discussion is that monetization strategies matter, as ad-funded internet businesses that need to monetize through advertising have strong incentives to adopt conduct that protects and enhances their ability to generate, harvest and exploit user data, to pre-empt rivals from establishing businesses that (while currently complementary) can provide a threat to their data generation engines, and to expand and exploit their power in monetization technology (as intermediaries at all levels of the digital advertising supply chain). Business that do not monetize in the same way (but by charging for their services, or selling a complement, taking a cut on third party sales on the platform, or taking a cut on a transaction in which they are matchmakers) do not generate quite the same incentives.

Getting a handle on these distinctions helps steer the economic research that needs to be done to support relevant theories of harm. We do have economic models (and empirical work) on competition on a conventional platform (e.g. broadcasting) between third parties and the integrated platform owner. There is nascent (but still limited) work being done to update them to a digital context: how do our established insights from other environments carry over to digital? And how does consumer behavior affect the analysis? The intersection of what we know about the

incentives of different business models (advertising, applications, offline services, hardware), plus behavioral insights on consumers, is the current challenge in the analysis of digital platforms. Our models need to be adapted and re-written using a digital setting and platform terminology. This process has started, but needs much further focus on the part of the academic community.

## III. THEORIES OF HARM TO CAPTURE CONDUCT – THINKING OF INCENTIVES

Foreclosure is a powerful, well established mechanism which is usually the "go to" enforcement theory in situations where a very dominant player controls a bottleneck (internet traffic, access to users). It has a strong pedigree because of the *Microsoft* case – where Microsoft engaged in anti-competitive tying to protect and leverage its OS monopoly on computers from potential threats materializing in a world of internet and distributed applications. What "made" the story was that there was a credible dynamic threat to Microsoft's dominant OS being replaced in the future. That said, it cannot be bandied about each time someone (a rival platform, a supplier to a platform that is thus currently a complement) does not make as much money as it would like, or faces competition from an integrated service provided by the platform. There need to be clearly articulated incentives to foreclose, and we know these are most powerful when there is a plausible dynamic leveraging story at play (such that it is not just some market share shift that is at issue, but that the current incumbent is in fact concerned about being replaced in future by a challenger). And there needs to be an ability to foreclose: conduct that only affects a rival/complement on one channel but has no effect on other channels is not going to succeed to marginalize and may have other explanations. A case that fits exactly within this established framework, which is that of the *Microsoft* case, is *Android*: the EC and other regulators concluded there was exclusionary tying/bundling of Google's Google Play app store with its search functionality, supported by pre-installation and default settings in a way that did not allow rivals to outcompete Google when OEMs chose a search engine for their devices.

Overall, **exclusion** is still a very rich seam for theories of harm in this space but they are not all going to be good, persuasive theories.

Should **"dual role"** theories, i.e. concerns around a "platform" operating a marketplace or a store while also simultaneously selling its own products in competition with third parties, be explored? We need to formulate clearly why we worry about this in the case of digital platforms like Amazon or Apple. We need to extend the analysis of vertical foreclosure stories (that we have dealt with in broadcasting and other contexts for years) and reformulate them in the digital context – with network effects, economies of scope, data, and consumer behavior. How do the insights of the "one monopoly profit" theory possibly extend to platforms which rely on complements and make a commission on each sale of third-party products?

Critically we need to devote more oxygen to **exploitation/unfair trading stories** – where the concern is that the platform can flex its power by creating various forms of friction, and imposing T&Cs on suppliers that they would not otherwise accept, but do so because they have no other way of accessing users. This may well be a form of exploitative abuse, unless there is evidence that there are good innocent explanations, and they have not worsened over time. Ultimately, though, these should be relatively easy to address, with commitments to amend T&Cs.

What about **commissions charged by a platform on sales** (such as Amazon's 15 percent in the case of third-party sellers, or Apple's 30/15 percent in the case of in-app subscription sales). Could this be a form of exploitation that we can tackle? But how is one to gauge complaints that these commissions are "excessive"? How does one decide whether a particular level of commission is "excessive"? Can we formulate some criteria, or do we simply say "this is too difficult, and agencies should not intervene on this basis"?

**More thinking needs to be done generally on exploitation as a category of harm.** This tool needs to be given content and dialed up, because not all the concerns we have take the form of leveraging power in one market to foreclose direct competition in another. Sometimes power is wielded in order to induce, for example, suppliers to adopt practices that benefit the platform, but are harmful to suppliers and/or consumers - even if they do not exclude them or are not in danger of foreclosing as such. This is a form of exploitation and it needs to be looked at as such, not "force fit" into a tying case.

**But how should we define "exploitative" abuse?** A classic way to think about exploitation is "practices that involve direct harm to consumers through the imposition of excessive prices/unfair terms of sales/contractual provisions." Under this definition, exploitative abuse involves direct consumer harm, and this distinguishes it from exclusion, which concerns practices leading to foreclosure of rivals not based on merit (and only indirectly leads to consumer harm, by reducing competition). But "conduct which harms consumers directly" is not enough – we have situations like discrimination on the platform that may not lead to exclusion and yet can distort competition, eventually harming consumers. **One way to do this could be to include "customers" in our definition of "consumers,"** and thus also to **include under potential "exploitation" conduct that harms firms that do not compete directly with the dominant platform, but do business on it as complements.** This way, firms that use the dominant platform as an "input" would be treated as "consumers."

We can then think of several theories of harm that may fit. We need to look into conduct that amounts to coercion, e.g. imposing on counterparties practices that they would not otherwise adopt, but favor one's own model and business, ultimately distorting competition and damaging consumers. The key is that these concerns do not rely on a foreclosure mechanism.

Exploitation can be also useful in thinking about potential concerns around practices that lead to **asymmetric access/hoarding of data.** For instance, the concern publishers expressed about Google's "accelerated mobile pages" ("AMP") technology was that Google imposed a particular online publishing format as a condition of appearing in the "news carousel" at the top of Google's search results pages, as a result of which Google had access to publisher data in a way that the publishers themselves did not. In the case of Amazon, the concern that is being examined is whether Amazon can "see" its sellers' data and use them to make informed decisions on product selection and pricing, in a way that may disadvantage and undermine the sellers themselves. This could potentially be a form of exploitation as well.

More generally, the current confusion concerning the accumulation and exploitation of user data (i.e. who gets to obtain it, keep it, combine it, or exploit it without understanding and consent) is quite obviously a matter for regulation, but may well fall also under a notion of exploitation. Platforms impose conditions (often disguised as technical requirements) to capture data about consumers of suppliers using the platform to then build a data "moat," without sharing the data symmetrically with the suppliers who contribute to generating it. A reasonable counterfactual should be that a business operating on a platform needs to get full information about the customers it serves, and can then use this information to improve its competitive offering. If a platform imposes technical conditions for access to its key input (traffic, visibility, ranking in search) that result in asymmetric access to data by the businesses it serves to its own customer information, this is unfair and exploitative.

**Misinformation** can also feature here. Conduct that distorts/restricts the information available to consumers when choosing between products should be capable of being scrutinized (including discrimination in rankings without objective reasons, and other means of biasing/limiting the information available to consumers, leading to poor consumer choice).

## IV. TO SUM UP

Antitrust tools can and should be powered up to deal with concerns in the digital space, and we should not be afraid to do so because precedents are scarce, or we need to develop economic insights (formally and empirically) to extend to these environments. This requires imagination, research, and work, but there is no reason why we should concede ground entirely to *ex ante* regulation.

In order to do so effectively, we also need to carefully consider the incentives that are associated with various companies' different business models. Understanding this can help to map concerns about conduct into credible theories of harm, and clarify why the practices we observe may be more or less likely to have anticompetitive effects in some cases than in others. Of course, monetization strategies and business models are a key dimension, but only one, of an analysis that needs to consider also the implications for incentives of features like data economies of scope, and how all this intersects with behavioral bias of consumers. But "follow the money" (and "follow the data") seems a useful starting point.

# CADE AND THE CHALLENGES OF THE DIGITAL ECONOMY

BY PATRICIA ALESSANDRA MORITA SAKOWSKI & CHRISTINE PARK[1]

1 Deputy Chief Economist, and Consultant for the Digital Economy at the Administrative Council for Economic Defense ("CADE"), respectively.

# I. INTRODUCTION

Antitrust authorities have been responding to the challenges posed by innovative markets, disruptive businesses and a fast-changing economy worldwide, and it has not been different with the Brazilian Administrative Council for Economic Defense ("CADE").

Studying the impact of the digital economy on antitrust analysis and designing adequate responses has been an institutional priority for CADE in recent years. This article focuses on three topics that summarize CADE's recent actions in response to the emergence of the digital era:

- Institutional strengthening;
- Domestic and international cooperation; and
- Advocacy

# II. INSTITUTIONAL STRENGTHENING

CADE understands that the main pillar of its effective enforcement of competition law and policy is its staff. Therefore, training and enhancing the capacity of its staff has been a major goal at the institution. In April this year, for example, we conducted an internal workshop on competition and the digital economy, with the participation of over 100 people who engaged in debates, case simulations, and sharing of experiences, on two main topics: (i) how the emergence of digital markets will affect competition enforcement in Brazil; and (ii) what CADE can do to adequately continue developing its functions in this new scenario.

CADE is also undertaking efforts to increase staff numbers. In recent years, the Department of Economic Studies ("DEE"), for example, has almost tripled in size. This year, CADE conducted a major process to recruit civil servants, which received more than three thousand applications. Of course our goal is to grow not only in numbers, but in quality. In the context of the digital economy, CADE has been aiming to enhance its in-house competence related to the digital market, in areas such as data science and information technology ("IT").

We have also been working to consolidate and develop our analytical toolkit. For instance, we have recently published Guidelines for Remedies,[2] as well as Guidelines for the submission of data to CADE's Economic Department.[3] We are also working on guidelines for fine calculation, as well as a manual for unilateral conduct analysis.

The challenges posed by technological developments also represent an opportunity for competition enforcers to develop more effective tools in the fight against anticompetitive conducts such as cartels. This is the case with the "Brain Project" (or "Cérebro"), which uses data mining techniques to identify evidence of cartels, such as suspicious facts or behavioral patterns, and to provide relevant information in cases under investigation. The Cérebro interface consists of a platform that integrates public procurement databases and applies data mining tools and economic filters to identify possible patterns and measure the probability of cartels in public bids. CADE derived mathematical models from academic articles to create statistical tests for general use in a kind of reverse engineering process, as described by the 2019 OECD Peer Review on Brazilian Competition Law and Policy. This technology allows for the automation of analyses formerly conducted by investigators and case handlers. Some investigations have been started as a result of the Cérebro tool. This also reduces CADE's reliance on leniency agreements to detect cartels.

Finally, CADE has been undertaking many empirical studies as a way to inform decision-making. For example, CADE has conducted a series of empirical studies on ride sharing apps and is working on *ex-post* analysis of mergers, as will be further mentioned in Section IV, below.

2 Available in Portuguese at http://www.cade.gov.br/acesso-a-informacao/publicacoes-institucionais/guias_do_Cade/copy_of_GuiaRemdios.pdf.

3 Available in Portuguese at http://www.cade.gov.br/acesso-a-informacao/publicacoes-institucionais/guias_do_Cade/guia-para-envio-de-dados-ao-dee-do-cade_final_site.pdf.

## III. DOMESTIC AND INTERNATIONAL COOPERATION

The second challenge relates to the need to coordinate competition enforcement, both domestically and internationally. At the domestic level, in Brazil, we have different bodies that regulate sectors that have significant interplay with competition policy in the digital economy, such as consumer protection, data protection, and the financial sector.

This interplay between consumer protection, data protection, and competition policy is tight. As noted by the OECD, an increasingly important concern of merger control in the context of the digital economy is the accumulation of consumer data.[4] Personal data collected and processed by internet companies reveal a great deal about users' preferences and characteristics. On the one hand, companies might use data to improve the design and features of their own platforms, or to better tailor the marketing of products and services according to the specific interest of their customers. On the other hand, such technologies allow the employment of highly sophisticated segmentation, like microtargeting or geotagging, which in turn makes it possible to restrict competition and prevent users' access to certain goods or services based on their personal features. Additionally, CADE is aware of the risks that the exploitation of big data by companies may pose to the protection of other rights, such as the right to privacy. Therefore, CADE understands that the dynamics of digital platforms give rise to a close relationship between data protection, privacy and competition policy.[5]

In August 2018, Brazil enacted the Brazilian Data Protection Law (Law n. 13.709/2018, "LGPD"),[6] which regulates the treatment of personal data, defined as information relating to an identified or identifiable person, with the aim of protecting, among others, the fundamental rights of freedom and privacy.[7] The LGPD also introduces rights for personal data subjects *vis à vis* the controller[8] of its data, which includes but is not limited to the right to obtain (i) the confirmation of the existence of treatment; (ii) the access to the data; (iii) the correction of incomplete, inaccurate or outdated data; and (iv) the portability of data to another provider. In 2019, the Brazilian Congress approved a modification to the LGPD, creating the National Data Protection Authority ("ANPD"), which will be in charge of drafting guidelines for a national personal data and privacy protection policy. The LGPD will come into force in 2020. With the new Data Authority due to open, CADE understands the importance of working to shape a cohesive regulatory landscape, which will require intensive cooperation among the different authorities.

In this regard, CADE has been working hard on actions aimed at establishing closer cooperation with other bodies in Brazil´s public administration. CADE signed a cooperation agreement with the National Consumer Secretariat ("SENACON").[9] The agencies committed themselves to exchange technical information and promote joint actions that guarantee effective consumer protection and the strengthening of competition. We are also working on creating channels for direct communication between both agencies and developing joint activities aimed at consumer education.

CADE also signed a Cooperation Agreement for the exchange of technical information and for the promotion of a closer relationship between CADE and the National Institute of Industrial Property ("INPI").[10] CADE and INPI committed themselves to provide technical subsidies for the analysis of administrative processes and to exchange information, knowledge, data, and documents, safeguarding the confidentiality of information. They also committed themselves to conduct studies, events, and seminars that relate to both intellectual property and antitrust.

Finally, as an example of a regulated sector, the Brazilian competition authority signed in 2018 a Memorandum of Understanding with the Central Bank of Brazil ("BCB"), the body responsible for the financial market. This document established a framework for interaction between the two different bodies in the analysis of mergers and in the investigation of possible violations of the economic order involving financial institutions under the BCB´s supervision. This document was later developed into a joint normative resolution[11] that establishes, among other things, procedures to harmonize and render the enforcement activities of the respective bodies in merger review in the financial system more efficient. The

4 Implications of E-commerce for Competition Policy – OECD Secretariat Background Note. June 6, 2018. DAF/COMP(2018)3. Apud (Lao, 2018b).

5 As presented in CADE's replies to the internal questionnaire circulated within the BRICS Competition Authorities Working Group on the Digital Economy and published in the First Report "BRICS in the digital economy: competition policy in practice," available at http://www.cade.gov.br/acesso-a-informacao/publicacoes-institucionais/brics_report.pdf.

6 Available in Portuguese at: http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2018/Lei/L13709.htm.

7 According to article 1 of the LGPD.

8 According to article 5, item VI of the LGPD, controller is the legal or natural person, private or public, that is responsible for deciding on the treatment of personal data.

9 Available in Portuguese at http://www.cade.gov.br/acesso-a-informacao/convenios-e-transferencias/acordos-nacionais/sei_mj-6330054-acordo-de-cooperacao-tecnica.pdf/view.

10 Available in Portuguese at http://www.cade.gov.br/acesso-a-informacao/convenios-e-transferencias/acordos-nacionais/cade-e-inpi.pdf/view.

11 Available in Portuguese at https://www.bcb.gov.br/conteudo/home-ptbr/TextosApresentacoes/Ato%20normativo%20conjunto%205_12_2018%20limpa.pdf.

act also provides for the sharing of information between CADE and the BCB for joint action in competition, as well as periodic meetings between the two bodies.

As digital markets are borderless, international cooperation becomes indispensable for consistent decisions, for example in the remedies applied worldwide by different jurisdictions to global players. CADE has been pursuing active cooperation with different actors in the international arena.

Since the last BRICS Conference, in 2017, Brazil has been the main coordinator of the BRICS Working Group for the Digital Economy, which is co-chaired by Russia. The first meeting of the working group was held in 2018 in Brazil. On that occasion, BRICS representatives agreed that CADE would prepare a joint report regarding the digital economy, based on the answers provided by the five countries to a questionnaire drawn up by Brazil.

The report describes how CADE and the other BRICS countries are dealing with the challenges posed by the digital economy and was released at the BRICS Conference in September, in Moscow, Russia.[12] This was the first joint document of the BRICS authorities regarding the digital economy.

CADE also promoted an international conference on the digital economy: Designing Antitrust for the Digital Era, in July, 2019, where international experts and representatives of competition authorities were invited to discuss the challenges of the digital economy for antitrust enforcement. This Conference also hosted the second meeting of the BRICS Working Group on the Digital Economy, which was a valuable opportunity to reunite the BRICS antitrust authorities to discuss the digital market.

Another key factor in strengthening international cooperation in the digital economy was CADE's recent change of status to an associate member of the OECD Competition Committee. This places CADE in a more prominent position in discussions regarding international best practices, including competition authorities' approach to the digital economy. Within the OECD framework, CADE also participates in the Latin American and Caribbean Competition Forum, which aims at promoting dialogue, consensus building and networking among competition officials in the region.[13]

In particular, we believe that competition authorities might benefit a great deal from discussing cases which have been common to different jurisdictions.

In order to stimulate further debate, we raise some questions on the topic of domestic and international cooperation: To what extent do the policies applied by the different bodies related to the digital economy in the domestic arena need to be harmonious to be effective in their respective realms? What institutional mechanisms could be created to facilitate this harmonization? What could we learn from the international experience in this field? How can we create more effective institutional mechanisms for cooperation among antitrust authorities? While coordinating domestic regulation in the digital economy seems desirable, could we apply this same logic in the international sphere?

## IV. ADVOCACY

CADE has been giving special attention to enabling the development of an ideal environment for the emergence of disruptive businesses in the economy. Therefore, it is particularly important for CADE to have strategies to guarantee entry conditions in the market and to be vigilant about conduct leading to market foreclosure. This is achieved through enforcement of competition law, when anticompetitive conduct related to market foreclosure takes place, but also through advocacy work to guarantee regulation will not unduly restrict competition or entry.

CADE considers that competition advocacy is a crucial tool to guide the development of regulation and policies within other government branches. Coordination between different sector regulations and competition policy is a common challenge faced by competition authorities.[14]

12 The Report is available at http://www.cade.gov.br/acesso-a-informacao/publicacoes-institucionais/brics_report.pdf.

13 According to the 2019 Latin American and Caribbean Competition Forum website available at http://www.oecd.org/competition/latinamerica/2019forum/.

14 In Brazil, regulatory and competition authorities work separately and are autonomous from each other in their decisions. In the financial sector, mergers are subject to review by both CADE and the regulatory authority - the BCB. Both authorities signed a Memorandum of Understanding in 2018 that clarifies the competencies and how the cooperation will take place between the authorities. In mergers, both CADE and the BCB will take their own decision, independently and according to the respective procedures. The one exception applies to cases that pose a potential systemic risk to the financial sector, in which the BCB will inform CADE about systemic risks and CADE will decide based on the reasoning provided by the regulatory authority. CADE continues to be the sole authority in charge of conducting investigations of anti-competitive conduct according to the Brazilian Competition Law. This notwithstanding, CADE will consult with the BCB before rendering a final decision, especially with regard to the imposition of sanctions.

As we know, one of the main goals of regulation is to address market failures. In the case of taxi services, for example, two major market failures are information asymmetry and negative externalities. The former occurs because consumers do not have prior knowledge about the type and the quality of the service they will hire and have little ability to negotiate fares. This information asymmetry could encourage taxi drivers to take a route longer than necessary, charge abusive fares or drive an unsafe vehicle. The second failure occurs because the individual passenger transport market affects economic agents that are out of the market due to either traffic congestion or to air and noise pollution. Hence, free entry could be characterized as an example of the so-called "tragedy of the commons": free access to the resource (i.e. the taxi market), could cause an accumulation of negative externalities that would end up harming that very resource.

While regulation helps to minimize these market failures, it can also generate high social costs. The establishment of fixed fares may prevent discounts and, consequently, price competition. The limitation of taxi licenses inhibits the entry of new drivers, which may cause supply shortage and, consequently, a weakening of the market. In this context, disruptive innovations come into play, as they have the potential to fix market failures and address regulatory concerns in several markets. When a disruptive innovator enters the market, it can break monopolies and match supply and demand more efficiently. However, disruption can also render much conventional regulation outdated. CADE has been playing an active role in advocating that conventional regulation should not be directly transferred to disruptive businesses, which could offset many of the benefits generated by innovation, or impose unnecessary barriers to new entrants.

One example is CADE's work in the ride-sharing or individual passenger transport market. In 2015, CADE's Department of Economic Studies published two studies: "The market for individual passenger transportation: regulation, externalities and urban balance,"[15] and "Post entry rivalry - the immediate impact of Uber's app on taxi rides."[16] The goal was to assess the main implications of ride-sharing platforms for both the individual transportation market and urban planning in Brazil. The main findings showed that ride-sharing online platforms could be a viable solution not only to market failures in the transportation sector, such as asymmetry of information, but also to urban problems, such as traffic jams and high rents in the core areas of big cities. In 2018, the DEE published the updated version of the previous studies, entitled "Competition effects of the sharing economy in Brazil: Has Uber's entry affected the cab-hailing app market from 2014 to 2016?"[17] This paper argues that in order to bring more benefits to consumers in terms of innovative services, improved quality and security, lower prices and more options, it is necessary to orient the debate towards a gradual deregulation of taxi services, especially concerning issues related to barriers to entry and pricing freedom.

## V. FINAL REMARKS

CADE has been aware of the challenges raised by the digital economy and has been actively seeking to respond adequately to them. As discussed above, this has been done through the enhancement of its staff, through seeking domestic and international cooperation, and through continuous advocacy work.

In this endeavor, many questions are raised, without clear-cut answers. We are attentive to the fact that this work will require constant engagement and self-reassessment, as well as openness to enhance our strategies. Therefore, CADE is eager to debate and refine them with other antitrust authorities, academics, and practitioners in the international arena.

15 CADE's Working Paper 01/2015, available at http://en.cade.gov.br/topics/about-us/dee/working-paper-001-2015.pdf.

16 CADE's Working Paper 03/2015, available at http://en.cade.gov.br/topics/about-us/dee/working-paper-003-2015.pdf.

17 CADE's Working Paper 01/2018, available at http://en.cade.gov.br/topics/about-us/dee/working-paper-uber_01-2018.pdf

# IDENTIFYING EMPIRICALLY THE EXTENT OF ECONOMIC ANALYSIS AND THE LEGAL STANDARDS APPLIED IN ANTITRUST ENFORCEMENT: A METHODOLOGY

BY YANNIS KATSOULACOS[1]

1 Professor of Economics, Athens University of Economics; yanniskatsoulacos@gmail.com. This is a substantially revised and condensed version of the methodology developed by and described in Y. Katsoulacos, S Avdasheva & S. Golovanova), in *Festschrift in Honour of Frederic Jenny*, Concurrences Review (2018) (the "2018 Methodology Paper").

# I. INTRODUCTION

In our 2018 Methodology Paper, we proposed a methodology for identifying empirically the extent of economic analysis and the legal standards ("LSs") applied in antitrust enforcement. This begins with the understanding that there are variations in the legal standards adopted in competition law enforcement, which is captured by thinking of a continuum at the extremes of which are (1) "strict" *per se* (or object-based) standards, and (2) "full" effects-based ("EB") or "rule of reason" standards.[2]

The progression towards full effects-based standards requires additional "blocks" or components of economic analysis to be applied. These components relate to the definition of the relevant market, the assessment of market power, the assessment of whether market power raising or exclusionary effects is present, the articulation of a theory of harm, the assessment of efficiency effects, and the assessment of what is, ultimately, the welfare impact of the conduct. These components can be identified by analyzing the documents on particular decisions made by a Competition Authority ("CA"). Specifically, all relevant information can be extracted from the texts of the decisions and be categorized by assigning to a variable corresponding to a given component of economic analysis a value of 1 for "Yes" (in case the analysis has been undertaken) or 0 for "No" (where it has not been).

The methodology identifies four broad categories of economic analysis (labelled A, B, C, and D in Table 1 below) that must be performed for the investigation of a CA to constitute an effects-based (or rule-of-reason) analysis.

One or more sub-variables form part of each of these main categories of economic analysis, and are labelled as C.1, C.2, C.3, and so on, in Table 1. Taking into account the fact that non-exploitative and exploitative (in the form of excessive prices) types of conduct require different blocks of economic analysis, different analysis variables must be used in each. Table 1 shows the blocks of analysis in investigations of non-exploitative conduct types. The methodology abstracts from differences in the analysis variables that could be included in the assessment of each specific conduct type, among the many in the non-exploitative category, assuming that these are about the same.

The statements used to identify whether a component of economic analysis has been applied for the non-exploitative conducts are the following:

**Table 1: Types of Economic Analysis Taken Into Account in the Construction of the Indicators of the Extent of Economic Analysis (or EB indicators)**

| Restrictions of Competition By Means Other Than Exploitative Conduct | | | |
|---|---|---|---|
| **Statement Category** | **Statement Description** | **Comments** | **Score** |
| A | Discussion of the nature and characteristics of the conduct | Since in all cases there must be some discussion of the nature and characteristics of the conduct, we should not get a score of "0" here.<br><br>It is included for purely formal reasons, to remind ourselves that an overall score of "1" is a strict per se approach to assessment and that this means that the CA only considered the nature and characteristics of the conduct. | 0/1 |
| **B** | **Market Analysis** | | |
| B.1 | Basic analysis of market characteristics based on available market statistics | Economic theory is even necessary in order for a CA to "frame" a case. This typically involves information about the structure of the industry, the firms, the structure of demand and the technology, and determination of market shares (without formal analysis of market definition). It is the first step in an economic analysis in the context of a competition case. | 0/1 |

2 See Jones, Alison & Kovacic, William E., *Identifying Anticompetitive Agreements in the United States and the European Union: Developing a Coherent Antitrust Analytical Framework* (February 17, 2017), Antitrust Bulletin. the United States and the European Union – Developing a Coherent Antitrust Analytical Framework' (2017) Antitrust Bulletin 62(2) 2.

| or B.2 | Formal market delineation and market share determination, based on Hypothetical Monopolist methodology. | Market definition decisions based not on qualitative assertions but on more sophisticated economic tests (e.g. SSNIP test, Price correlation and Critical loss analysis). | |
|---|---|---|---|
| **C** | **Evidence on restrictions of competition/ consumer harm imposed** | | |
| C.1 | Analysis undertaken in order to identify whether conduct has market power enhancing (e.g. through agreements) or exclusionary effects (e.g. in monopolization practices) | This need not include the construction of a formal model (e.g. examination of incentive compatibility constraints in a concerted practice case, or examination of how exclusive contracts could lead to exclusion or prevent entry in the specific context, or "equally efficient competitor test"). But must indicate a serious effort to demonstrate the presence of such effects. | 0/1 |
| C.2 | Articulation of theory of harm to consumer welfare (without taking into account of efficiencies) | When "scoring" CA decisions, this need not be a full-blown formal analysis, but one could also score some effort towards determining where the case stands, on the basis of assessing crucial aspects of the situation (e.g. assessing the size of non-contestable demand of a dominant firm, competitive constraints by established or new competitors) in showing negative impact on consumers. | 0/1 |
| C.3 | Analysis of potential efficiency defense | Analysis should be based on efficiencies that are expected to result from conduct, that will create benefits to consumers (again, this need not be very sophisticated but must indicate a serious effort to take efficiencies into account). This may involve an analysis of a potential efficiency defense relating to factors that tend to prevent a price rise or other harm to consumers.<br><br>Counterfactual analysis[3] may be undertaken under any of the "C" components – though this is not strictly necessary for considering the investigated effect as established. | 0/1 |
| **D** | **More effects-based analysis to determine effects on social welfare** | | |
| D | Balancing of potential anticompetitive effects of conduct with all the potential efficiencies and determination of the final impact on total welfare. | This is any analysis "over and above" the analysis that may have been included under "efficiencies" above (taking into account efficiencies that need not impact consumers, especially in the short-term). By "balancing" we mean any formal economic analysis that attempts to measure the net effect of the conduct, that may not be related to efficiencies, e.g. balancing the short-term and long-term implications of a refusal to license (or of compulsory licensing) an innovation. | 0/1 |
| **Total Score** | | **6** | |

Source: Revised from the 2018 Methodology Paper

Note that the value (1 or 0) of an analysis variable (e.g. of B.2 or C.2, etc.) is based on a judgment as to whether the relevant analysis has been undertaken or not, and it says nothing about the correctness or "quality" of the analysis or of the data used. In other words, the value of an analysis variable indicates whether the CA, in the particular case, has tried to address the specific question associated with that analysis variable.

3 I.e. analysis proposing that a theory of harm is not valid and demonstrating the absence of foreclosure effects and consumer harm of exclusionary conduct.

## II. EFFECTS-BASED SCORES AND TYPES OF LEGAL STANDARDS

On the basis of the above methodology, one can construct effects based scores ("EBS"), using the 6 statements above. EBS are calculated as the sum of the analysis variables presented in Table 1 – with a minimum of 1[4] and a maximum of 6. The question is: is it reasonable for undertaking empirical analysis to use data that aggregate scores over many different forms of conduct (e.g. all types of non-exploitative conduct)?

The answer is that a straight aggregation of scores across different conduct types will not provide indicators which can be used to undertake meaningful empirical analysis of the extent of economic analysis and type of LSs adopted. Such EBS cannot be used to measure meaningfully whether economic analysis is used "optimally" – since optimal LSs can only be defined at the level of each type of conduct.

Furthermore, such EBS cannot be used to make comparisons between different countries and over time – since the level of the score levels will depend on the composition of conduct types that will be different for different countries, and will change over time. So, for example, an EBS of, say, 2.91 for both Greece and France certainly does not mean that the extent of economic analysis relative to some optimal level is the same in Greece and France given that the composition of conduct types may well be completely different between the two countries.[5]

Moreover, such EBS cannot be used to examine how changes in the economic analysis, if measured by changes in the value of the score, affect the annulment rate of the CA's decisions, since the latter is expected to be influenced by what "type" of economic analysis[6] is utilized and how this changes, while a given value of EBS cannot reflect what "types" of analysis are utilized and, when the value of the score changes, what "type" of economic analysis is responsible for the change in the score's value.[7]

Empirical researchers can respond in two ways to the above difficulties in undertaking empirical analysis. One way is to use available data for each conduct type and constructing indicators for each conduct type,[8] using a table (that may be very similar to Table 1) identifying the analysis variables for the specific conduct type. This is not an approach without disadvantages, an important one been that the number of decisions for each conduct type in any given country is small, making difficult statistical analysis of, for example, how LS affect the annulment rate of the CA's decisions. The number of decisions can in principle increase through the collection of data from different countries though this increases substantially the necessary effort for putting together the database and makes more difficult the interpretation of results.

A second way[9] is, rather than use the EBS described above, to use EB indicators that result from aggregation across conduct types but for which, when aggregating, we make sure that we assign the same score to different decisions only when the same amount *and also* the same "type" of economic analysis is undertaken. This procedure can be used to define LS indicators both at the level of specific conducts and for groups of conduct types. Its use in defining LS indicators for groups of conduct types (e.g. all non-exploitative conduct types) allows one to undertake statistical / econometric analysis of how variations in the LS adopted affects the annulment rate of the CA'a decisions. We describe in details this procedure below for all non-exploitative types of conduct (these include horizontal and vertical agreements, concerted practices, and exclusionary conduct[10]) – of course, the procedure is the same for defining LS indicators at the level of a specific conduct.

Following this procedure, the analysis variables that describe the different analytical steps used in antitrust investigations are ordered as in Table 1 above, that is, in a sequence that represents what most economists would recognize as representing successively increased application of economic analysis. That is, Table 1 describes additional blocks of analysis applied, as we move from strict *per se* to full effects-based LS. This is very useful in mapping the extent of the economic analysis applied in a specific case to the LS used in that case. Of course, while we

4 As noted in Table 1, there must always be at least some discussion of the nature and the characteristics of the conduct so the minimum EBS will be 1.

5 E.g. in France there may be proportionally many more decisions on conduct types for which the appropriate LS is *per se* or close to *per se*.

6 For example, different types of economic analysis can lead to a score 3 and different ways of increasing economic analysis can increase the score from 3 to 4 but the implications of each case for the rate of annulment may not be the same.

7 An important empirical question is whether adopting LS closer to effects-based will increase the annulment rate of decisions by appeal courts.

8 The main broad categories of conduct types among non-exploitative practices are horizontal and vertical agreements and concerted practices and unilateral exclusionary conducts by dominant firms. The amount of data for each specific conduct type, e.g. for bundling, among those in the non-exploitative conducts category, is quite small for any one country for undertaking empirical analysis.

9 Which is, indeed, complementary to also using data from different countries together.

10 There are significant common elements in the assessment of these conduct types to justify using a unified methodology for constructing EB indicators. Of course, we could distinguish (additionally) between two sub-categories of anticompetitive agreements and exclusionary conduct (and can disaggregate even further) and construct EB indicators for each of these more disaggregated conduct categories. As already noted, the main disadvantage of disaggregating further is that disaggregation leads to smaller samples with which to undertake statistical work.

consider the order of statements above to reflect a common (or "natural") order in which economic analysis is applied as we move from "low" (*per se*) to "high" (effects-based) LS, this order cannot be considered to be universal for the assessment of all types of conduct in practice.[11]

Given these points, the aggregate EB indicator, that is used below to identify the legal standard adopted, is obtained by constructing the following sets of EB analysis ("SEBA"), which, hereafter, we will also term legal standard Indicators ("LSI"), using the statements in Table 1:

**S1:** this contains all the decisions in the sample in which we find "1"scores just for the A statement (for all other statements the score is "0").

**S2:** this contains all the decisions in which we find "1"scores for the A statement and for the B statement (for all other statements the score is "0").

**S3:** this contains all the decisions in which we find "1" scores for the A statement and for the B statement and for the C1 statement (for all other statements the score is "0").

**S4:** this contains all the decisions in which we find "1" scores for the A statement and for the B statement and for the C1 statement and for the C2 statement (for all other statements the score is "0").

**S5:** this contains all the decisions in which we find "1" scores for the A statement and for the B statement and for the C1 statement and for the C2 statement and for the C3 statement (for all other statements the score is "0").

**S6:** this contains all the decisions in which we find "1" scores for the A statement and for the B statement and for the C1 statement and for the C2 statement and for the C3 statement and for the D statement.

Thus, by construction, our (new) aggregate EB indicator (or LSI) with a value of 1 is represented by the set of decisions S1, that is, 1 is the value of the indicator when, in decisions, only block A of analysis is undertaken; our aggregate EB indicator (or LSI) with a value of 2 is represented by the set of decisions S2, that is, 2 is the value of the indicator when, in decisions, only blocks A and B of analysis are undertaken; our aggregate EB indicator (or LSI) with a value of 3 is represented by the set of decisions S3, that is, 3 is the value of the indicator when, in decisions, only blocks A, B and C1 of analysis are undertaken, etc.

In particular, we identify the following sets of decisions $S_i$, $i$=1,……6, as described above and the corresponding value of the aggregate EB indicator (or LSI) for each set:

**S1**: {A} –LSI of value 1.
**S2**: {A, B} - LSI of value 2.
**S3**: {A, B, C1} –LSI of value 3.
**S4**: {A, B, C1, C2} – LSI of value 4.
**S5**: {A, B, C1, C2, C3} – LSI of value 5.
**S6**: {A, B, C1, C2, C3, D} – LSI of value 6.

Now, by comparing the different sets of decisions, $S_i$, $i$=1,……6 we can identify the effects of additional economic analysis. For example, by comparing decisions in S2 with decisions in S3 we can identify the effect of adding the C1 block of analysis; by comparing decisions in S3 with decisions in S4 we can identify the effect of adding the C2 block of analysis. We are also able to identify the frequency with which the CA applies the analysis associated with each one of the sets in assessing different conduct types and, hence, infer the extent to which the CA favors a certain legal standard for the different conduct types (see below).

The 2018 Methodology Paper distinguishes between a number of distinct LS that are intermediate between strict *per se* and full effects-based, corresponding to the above-mentioned sets (see Table 2, below). A brief description of the main LS follows.

11 Also, when the order is followed, this may not be reflected in the decision text. For example, when in the text of a decision some analysis of a higher level (in the sequence) is found, this does not necessarily imply that lower level analyses have also been explicitly described. This is particularly important with regard to the B statements relating to the contextual analysis of the market and the firms. We believe that an analysis putting forward a theory of harm even if it is not preceded by an explicit description of the market in the decision text, will be based on developing some understanding of market characteristics and conditions.

- Under the strict *per se* ("SPS") LS, for which LSI = 1, the CA makes decisions on the basis only of the purely formal characteristics of the conduct under investigation, relying on strong presumptions about the implications of the general class of conduct to which the specific conduct belongs for welfare. Alternatively, one can say that under the SPS LS the CA makes inferences about effects (on welfare) from the formal characteristics of the conduct and some basic analysis of the market.

- The modified *per se* ("MPS") LS , for which LSI = 2, can be considered as a *per se* rule subject to a significant market power requirement or, more generally, as supplementing *per se* by undertaking an analysis of market characteristics, for example, when assessing conduct under abuse of dominance, or in an information exchange agreement, or in a concerted practice for which there is no hard evidence of collusion. Alternatively, one can say that under the MPS LS, the CA makes inferences about effects (on welfare) from the formal characteristics of the conduct, detailed analysis of market characteristics and, depending on the type of conduct, the implications of these for incentives to achieve sustainable collusion and/or on the size of extant market power.

- Truncated effects-based ("TEB") LS, for which LSI = 3, represent a higher standard of economic analysis, under which decisions about whether or not there is liability in the case of specific conduct are reached by establishing that the characteristics of the specific conduct and of the market in which it is undertaken are such that it belongs to a class of conduct that distorts the competitive process by disadvantaging *rivals* (i.e. through exclusionary effects, widely defined) or by enhancing market power (as in a concerted practice case) and, assuming a welfarist substantive standard, by establishing that the conditions present are such that a strong presumption can be made of adverse welfare effects. Alternatively, one can say that under a TEB LS the CA decides that there is liability by inferring adverse welfare effects from the potential of the conduct to distort the competitive process by disadvantaging rivals (i.e. through exclusionary effects, widely defined) or by enhancing market power (as in a concerted practice case).

- The inclusion of analysis C2 (recognizing factors that affect whether exclusion, for example, reduces consumer welfare, before taking account of efficiencies) leads to an intermediate LS (for which LSI = 4), between truncated and full effects-based.

- Finally, full effects-based ("FEB") represents the LS under which a finding of liability relies on all potential anticompetitive (exclusionary or market power enhancing) and also potential pro-competitive (efficiency) effects of the specific conduct being assessed and compared and a showing of adverse effects on welfare (consumer welfare, for whch LSI = 5 with just the inclusion of C3, or total welfare for which LSI = 6 with the inclusion of D too), of the specific conduct being established.

A more detailed characterization of the various LS is given in the Table below.

**Table 2: Identifying Legal Standards**

| *Components of economic analysis applied in assessment* | *SEBA* | *Legal Standards / Value of LSI indicator* |
|---|---|---|
| A | S1 | Strict Per Se (SPS) LS:<br>LSI = 1 |
| A and B | S2 | Modified Per Se (MPS) LS:<br>LSI = 2 |
| A and B and C.1 | S3 | Truncated Effects Based (TEB) LS:<br>LSI = 3 |
| A and B and C.1 and C.2 | S4 | Intermediate between Truncated and Full Effects Based (FEB) LS (ITFEB):<br>LSI = 4 |
| A and B and C.1 and C.2 and C.3 | S5 | FEB LS under a Consumer Welfare Substantive Standard[12]<br>LSI = 5 |
| A and B and C.1 and C.2 and C.3 and D | S6 | FEB LS under a Total Welfare Substantive Standard[13]<br>LSI = 6 |

Source: Revised from 2018 Methodology Paper

12 That is, when the criterion about whether or not there is violation of law when assessing a conduct is whether or not there is an adverse effect on consumer welfare. Clearly, the economic analysis under statement D is not relevant (or, is not needed) when the substantive standard is that of consumer welfare.

13 That is, when the criterion about whether or not there is violation of law when assessing a conduct is whether or not there is an adverse effect on total welfare.

# WHY COMMON SHAREHOLDINGS SHOULD NOT BE CONSIDERED IN MERGER ANALYSIS

BY A. NEIL CAMPBELL[1]

1 The author is a partner in the Toronto office of McMillan LLP. This paper is a shortened and updated version of a paper presented at the 2019 CRESSE annual conference in the special policy session on Common Ownership, Market Power and Innovation. A previous article on a broader range of common ownership issues can be found in: A.N. Campbell, "A Competition Law Analysis of Common Shareholdings," CPI Antitrust Chronicle (October 2018). The assistance of William Wu, an associate in McMillan's Toronto office, is gratefully acknowledged.

# I. INTRODUCTION

Common shareholdings have generated extensive theoretical and empirical analysis and a vibrant competition policy debate over the past few years. They were discussed at length in the EU Commission (the "Commission's") clearance decision in *Dow/Dupont* (without being a basis for the outcome),[2] have been the subject of a roundtable at the OECD Competition Committee ("OECD"),[3] and were explored in the recent U.S. Federal Trade Commission ("FTC") Hearings on Competition and Consumer Protection in the 21st Century.[4] However, relatively little attention has been paid to the way in which such issues will be analyzed under merger control frameworks.

# II. THE NATURE OF COMMON SHAREHOLDINGS

It is important to distinguish minority shareholdings held by one company in another company (particularly a competitor) from investors which own small voting interests in multiple publicly-traded companies (some of which may compete in particular markets). The OECD describes the former as "cross ownership" or "cross shareholdings" and the latter as "common ownership" or "common shareholdings."[5]

The holdings of individual institutional investors in common shareholder situations are typically less than 5 percent of the voting equity in any individual operating company, and they may well be as small as 1 percent or lower. They usually are not accompanied by a right to representation on the board of directors. Nevertheless, the cumulative interests of institutional investors with common shareholdings may be in the 15-25 percent (or above) range in multiple firms in some oligopolies. For example, in *Dow / Dupont*, the Commission determined that "a small number of common shareholders, 17, collectively own around [21 percent] of BASF, Bayer and Syngenta and around [29-36 percent] of Dow, Dupont and Monsanto."[6]

# III. THE THEORIES OF HARM

The theoretical literature[7] has asserted that competitors that have significant common shareholders are likely to compete less aggressively with each other. The starting point is a variation on a "unilateral effects" theory of harm, with a focus on the common institutional shareholders.

The theory contemplates that each of the common institutional investors may have the ability and incentive to induce the various firms they have invested in to raise their prices or otherwise compete less aggressively. However, the theory is dependent upon the competing firms that have such shareholders choosing to raise their prices (or to compete softly on innovation or other non-price dimensions of competition) in order not to damage the broader interests of significant institutional shareholders (even though this may be contrary to the interests of remaining shareholders who do not hold shares in such competitors, and even though doing so may be a breach of fiduciary duties).

"Coordinated effects" theories of harm have also been extended to common shareholding situations. The potential basis for concern is that competing firms that have linkages at the shareholder level could reach understandings not to compete aggressively and/or may have increased incentives not to deviate from coordinated outcomes (e.g. not cutting prices). If the main competitors in an oligopolistic market each compete less aggressively, prices may end up above competitive levels and the firms may effectively exercise market power.[8]

---

2 Case M.7932, *Dow/Dupont*, Commission Decision of March 27, 2017 ("*Dow/Dupont*"). The discussion in this paper is based entirely on the non-confidential version of the decision published by the Commission.

3 See OECD Secretariat; "Common Ownership by Institutional Investors and its Impact on Competition (Background Note)," DAF/COMP (2017)10 (November 29, 2017), available at https://one.oecd.org/document/DAF/COMP(2017)10/en/pdf ("OECD Note").

4 FTC Hearing #8: Common Ownership, Hearings on Competition and Consumer Protection in the 21st Century (December 6, 2018), materials available at https://www.ftc.gov/news-events/events-calendar/ftc-hearing-8-competition-consumer-protection-21st-century.

5 See OECD Note, *supra* note 3, para. 17.

6 *Dow/Dupont*, Annex 5, para. 80.

7 See, e.g. E. Elhauge, "Horizontal Shareholding," 129 Harvard Law Review 1267 (2016); and E. Posner, F. Scott-Morton and E.G. Weyl, "A Proposal to Limit the Anti-Competitive Power of Institutional Investors," 81:3 Antitrust Law Journal 669 (2017).

8 However, soft competition is also a possible outcome under the standard industrial organization theory of oligopolistic industries, even in the absence of any common shareholdings. See OECD Note, *supra*, note 3, paras. 39-42.

## IV. MERGER CONTROL LEGAL FRAMEWORKS

This article explores the key legal principles that would apply to reviews of mergers in industries characterized by extensive common shareholdings in Canada and the U.S., both of which use a "substantial lessening of competition" ("SLC") test, and in the EU, with its "significant impediment to effective competition" ("SIEC") test. The conclusions are similar in all three jurisdictions (and significant parallels are likely to exist in many other jurisdictions).

Oligopoly theory does not provide clear benchmarks or methodologies to predict whether, and to what degree, oligopolistic competitors may engage in highly vigorous competition versus softer competition (often described as "conscious parallelism" or "tacit collusion"). The common shareholdings literature suffers from the same lack of clarity. It is possible that publicly-traded competitors in a concentrated oligopoly which have significant overlaps among their shareholders will compete less aggressively than in the absence of any shareholder overlaps, with the result that market power may be exercised by such companies. However, the intensity of competition in any particular oligopolistic market – with or without common shareholders – at any particular point in time requires a fact-specific inquiry.

There is now widespread consensus in industrial organization economics that horizontal mergers between competitors raise economic welfare concerns when a transaction is likely to preserve or enhance the ability of firms to exercise market power. Such concerns may arise through unilateral or "coordinated" effects (i.e. without, or with, accommodating responses by the competitors to the merging parties). In order to determine whether a merger would allow market power to be exercised, the critical comparisons are (i) the expected behaviour of the merging parties after, versus in the absence of, the merger; and (ii) whether the other current or potential competitors are likely to respond in a competitive or in a non-competitive manner.

The analytical frameworks in the merger review guidelines of the Canadian Competition Bureau ("CCB"),[9] the U.S. FTC and Department of Justice Antitrust Division (collectively, the "U.S. Agencies"),[10] and the Commission,[11] all define relevant markets and then consider market concentration plus various other factors in order to assess competitive effects that are likely to be caused by a merger.[12]

## V. MARKET DEFINITION

The CCB, the U.S. Agencies and the Commission all undertake market definition as an important first step in merger reviews. The Commission's guidelines focus on demand-side and supply-side substitutability.[13] The U.S. and Canadian guidelines purport to use the "hypothetical monopolist" methodology, but in practice this often devolves to more qualitative assessments of a variety of factors that ultimately speak to demand-side and supply-side substitutability.

The common shareholdings literature has paid relatively little attention to the difference between the broad concept of an industry or sector and the much narrower approaches used to define relevant markets as a starting point for assessing whether or not market power can be exercised. Broadly-defined oligopolistic industries will often encompass numerous relevant product and geographic markets. The common shareholdings literature does not provide any basis for abandoning market definition and the assessment of market power at the level of the relevant markets in which specific suppliers compete to sell to specific products or services to specific customers.

The difference between broad sector-level assessments and relevant market analysis can be observed in *Dow/Dupont*. While the common shareholdings were discussed in respect of the six largest multinational companies in the global agro-chemical industry as a whole, the competitive effects analysis required consideration of numerous separate markets. The Commission separately examined four broad product categories: crop protection, seeds and gene editing, material science, and specialty products, each of which encompassed broad ranges of commercial activity. Within crop protection products, for example, there were four overlapping sub-categories: herbicides, insecticides, fungicides, and nematicides. However, product markets were defined at an even more granular level, along segmentations by crop/pest combination. The

9 CCB Merger Enforcement Guidelines ("MEGs").

10 U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (August 19, 2010) ("HMGs").

11 Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 31 (2004) ("ECMGs").

12 Canada has a somewhat unique and complex efficiency gains defense: see *Competition Act*, s. 96, and MEGs, Part 12. There is also some limited scope for efficiencies to be considered in the U.S. and EU merger review regimes: see HMGs, § 10, and ECMGs, Part VII. However, common shareholdings do not generally give rise to efficiencies that could be relevant for merger analysis. Efficiencies are therefore not discussed in this article.

13 Commission Notice on the definition of relevant market for the purposes of Community competition law, 97/C 372/03 ("EC Market Definition Notice").

Commission also defined separate geographic markets for individual EU Member States. This approach resulted in a large number of extremely narrow market definitions (e.g. "post-emergence broadleaf selective cereal herbicides in Denmark").[14]

Individual relevant markets may or may not include each firm that has common shareholders in a concentrated oligopoly, and may or may not include various other firms that will be important to a correct assessment of market power in each specific market. For example, the six major agro-chemical companies that were the focus of the common shareholdings analysis in *Dow/Dupont* were each involved in numerous relevant product and geographic markets, but there were some markets in which one or more of these firms were not active, and there were numerous markets in which additional competitors were present to varying degrees. The Commission then analyzed competitive effects separately in each affected market where the merging parties had significant combined shares and concluded that the merger was likely to result in an SIEC in some markets, but not others.

Notably, the Commission did not conduct its analysis of the potential effect of common shareholdings for each relevant product and geographic market. It simply observed that common shareholdings were widespread in the agro-chemical industry and asserted that the market share calculations in the decision likely underestimated the concentration of the market structure and market power of the merging parties. However, had the Commission wanted to rely on common shareholdings as a relevant factor in any specific relevant market, the effects on concentration levels and market power would need to have been assessed on that narrower basis.

## VI. COMPETITIVE EFFECTS

Market power — and the effect of a merger on the ability to exercise market power — is difficult to measure in practice. Factors which are likely to affect the possibility of market power being exercisable as a result of a merger include market shares and concentration, the competitive vigour of the party being removed as an independent competitor, the effectiveness of remaining competitors in a market, any countervailing power of buyers, and the possibility of competitive responses from other parties, e.g. product or geographic expansion strategies, repositioning, new entry, innovation, etc. (collectively, "supply responses").

### *A. Market Shares and Concentration*

Market shares and industry concentration are relevant, but not determinative, considerations in the assessment of competitive effects of mergers. While there is a general expectation (and in some regimes, such as the U.S., a presumption) that higher market shares and/or concentration levels are associated with higher likelihood that market power can be exercised, there is not a precise level of market share or concentration — and/or merger-induced change in shares or concentration — that corresponds to an ability to exercise market power. Other factors affecting the ability of firms to exercise market power in practice must also be considered. This principle is reflected in the guidelines of the CCB, the U.S. Agencies, and the Commission.

The U.S. and EU guidelines put significant emphasis on HHI[15] as a measure of concentration that is assessed in parallel with market share data. The CCB tends to focus on market shares, supplemented by a simplistic CR4 concentration ratio and occasional consideration of the HHI measure.

The common shareholdings literature makes considerable use of a generalization of the HHI that takes into account partial ownership.[16] This "Modified HHI" ("MHHI") is equal to the HHI plus a term known as the MHHI Delta, which is a measure of the additional concentration that arises due to common ownership.

As with market shares and the HHI, there is not an exact MHHI level — or merger-induced change in the MHHI — that reliably indicates whether or not market power can be exercised. Given the much shorter history of the MHHI, with limited practical use to date in real cases,[17] extra caution is warranted if competition authorities begin to use such calculations as a component of merger reviews.

14 The Commission also considered "innovation competition" (i.e. competition in respect of research and early pipeline products) both at the industry level and at the level of crop/pest combinations globally (or at least within the EU) as separate relevant markets.

15 The HHI is the sum of the squares of the market shares of all the competitors in a market.

16 This is an extension of D. O'Brien and S. Salop, "Competitive Effects of Partial Ownership," 67 Antitrust Law Journal 559 (2000).

17 The Commission calculated MHHI measures at the industry level in Dow/Dupont, but did not rigorously assess or rely upon them for purposes of its decision.

Calculation of MHHIs is a data-intensive exercise. Unlike traditional HHIs, correct calculations of the MHHI require detailed information regarding *all the shareholders* (including affiliation relationships between them) of *all the competitors* in each relevant market, not just merging parties. In particular, correct calculation of the MHHI Delta requires information about the ownership share of each shareholder in each firm in the market and control weights of each shareholder over each firm in the market (measuring the degree of control or influence each shareholder has over each firm).

Some ownership shares may be available through public company shareholder disclosures. However, the affiliations between shareholders are often not transparent (particularly with private equity investors where separate funds with different individual investors may be managed by the same investment firm). The control weights used in MHHI calculations are generally based on assumptions. The simplest is the "proportional control" assumption, which assumes that the control weights are proportional to the number of votes each shareholder has. However, shareholders may have different practices regarding how they exercise their votes. For example, some shareholders may not vote at all or may give proxies to other shareholders. To ensure an appropriate calculation of the MHHI, the control shares require careful calibration for each shareholder/firm pair.

Proper application of the MHHI methodology therefore requires data from third parties in addition to the merging parties. Significant agency time is also required to obtain and properly analyze the common (and any affiliated) shareholders and their behaviours. In *Dow/Dupont*, for example, the Commission requested the merging parties to provide harmonized information on common shareholders amongst Dow and Dupont, as well as in respect of the other major competitors in the agro-chemical industry. The Commission also referred to publicly-available shareholding information. However, it acknowledged that "it did not perform a case-specific assessment that would justify applying a specific assumption on the control weights."[18]

### *B. Removal of a Vigorous Competitor*

Whether one of the merging parties is a particularly vigorous and effective competitor is an important consideration when assessing whether a market is vulnerable to coordinated behaviour among major competitors. The Canadian, U.S., and EU guidelines all consider whether a firm is a "maverick" that plays a disruptive role in the market to the benefit of customers in respect of prices or any important form of non-price competition (e.g. innovation).

The relevance of the vigorous competitor factor in a merger analysis that takes common shareholdings into account will depend upon the pre-merger ownership of the firm being acquired. If there are significant common shareholdings between the acquiree and other competitors in a relevant market (possibly, but not necessarily, including the acquiror), the common shareholdings theory would predict that the acquiree would not be a vigorous pre-merger competitor or maverick. In such circumstances, the merger is less likely to enable incremental market power to be exercised because the merger would not remove a significant source of competitive discipline from the market. Conversely, where the acquiree has no or insignificant common shareholders with the other main competitors in the industry, the vigorous competitor factor will apply in the normal manner and no additional consideration of common shareholdings is required.

### *C. Effectiveness of Remaining Competitors*

The ability of merging parties to exercise market power depends in large part on whether current competitors are likely to discipline a post-merger attempt to increase prices (or to reduce non-price dimensions of competition), or whether they are likely to accommodate and follow such an action by the merging parties. The Canadian, U.S., and EU guidelines all give prominent consideration to the extent of the competitive constraints that would be imposed by existing competitors.

While the effectiveness of remaining competitors is sometimes considered in the aggregate, the effectiveness of individual competitors may vary. The common shareholdings theory suggests that the competitive discipline provided by a particular competitor may depend on the extent of common shareholdings between the merging parties and that competitor. The degree of common shareholdings, and the extent to which any mechanisms that induce soft competition are operative, may vary widely. A rigorous analysis of the competitive effects of common shareholdings would require assessing these issues *individually for each competitor* in order to determine whether that firm is likely to discipline or to accommodate a post-merger attempt to exercise market power.

18 *Dow/Dupont*, Annex 5, para. 79.

*D. Buyer Power*

In some situations, the merging parties' customers may have sufficient countervailing power to resist an attempt to exercise marker power. The CCB, the U.S. Agencies, and the Commission all recognize that such an ability is not simply a matter of size or sophistication, but depends on the extent to which individual buyers have practical options that can allow them to resist price increases, such as the ability to switch suppliers, sponsor new entry, or retaliate against the supplier when making purchases in other product or geographic markets.

If the merging parties make significant sales to publicly-traded companies, it is possible that common shareholdings between the merging parties and their customers could affect the likelihood of an attempt being made to exercise market power. There is no *a priori* reason why common shareholdings between competitors in the same market (i.e. "horizontal common shareholdings") would affect their incentives to compete, but common shareholdings between suppliers and customers (i.e. "vertical common shareholdings") would not affect a supplier's incentive to attempt to exercise market power against downstream customers. This possibility requires *buyer-specific* analysis.

*E. Entry and Other Supply Responses*

Even if the competitors and/or customers of the merging parties are not likely to constrain attempts to exercise market power, such discipline may emerge from other firms that can provide supply responses (e.g. repositioning strategies, expansion from adjacent markets, new entry or innovation). The Canadian, U.S., and EU guidelines all consider whether these types of supply responses may provide a sufficient competitive constraint on the merged firm and also assesses the likelihood, timeliness and sufficiency of such supply responses.

In theory, each of these types of supply responses may be affected by the degree of common shareholdings between the firms that have the ability to undertake such responses and the merging parties (as well as other existing competitors in the relevant market). In practice, assessments of whether a constraining supply response is likely to occur should be made on a firm-by-firm basis since the ability, incentives, and likely behaviour of *each potential responding firm* may differ.

*F. Mechanisms by which Competitive Harm Would Occur*

The burden of proof for establishing that a merger is anti-competitive normally rests with the competition authority. While it is not entirely clear how much specificity would be required to establish that common shareholdings would result in a merger being found to generate an SLC or SIEC, a general assertion of the theory that common shareholdings may increase the likelihood of unilateral or coordinated effects is unlikely to be sufficient to justify interfering with a specific merger transaction under the Canadian, U.S., or EU regimes, or in any other merger control system that requires evidence-based decision-making.

The common shareholdings literature hypothesizes four main mechanisms by which institutional investors with common shareholdings may have the ability and incentive to get the firms in which they hold shares to compete less:[19]

- ***Shareholder Votes.*** In a public company whose shares are widely held, institutional shareholders with holdings in the 1-5 percent range may be given careful consideration by directors and management. However, votes typically occur at annual shareholder meetings, are limited to broad governance matters and rarely involve day-to-day operating decisions or even larger competitive strategy decisions.

- ***Direct Communications.*** Meetings or other direct communications with senior management and/or directors of the competing firms in which an institutional shareholder has invested could allow for more detailed communications regarding significant aspects of competitive strategy. However, this mechanism involves potentially serious legal risks for both the institutional investors and the competing firms if the communications involve pricing or other specific competitive matters. Understandings between an institutional shareholder and the managements of two or more firms in which it has invested could give rise to liability for a "hub-and-spoke" conspiracy or concerted practice that may be substantial to significant penalties in many jurisdictions including Canada, the U.S., and the EU.[20] In addition, senior management and directors would expose themselves to allegations of breaching their duties to act in the best interests of all their company's shareholders, rather than just the institutional shareholder(s) with the common shareholdings.

19 The OECD Note, *supra* note 3, contains useful discussions of these mechanisms and related critiques. See particularly paras. 51-80. The Commission did not examine these possible mechanisms in *Dow/Dupont*, and there has been limited documentation of such mechanisms operating in practice.

20 In some jurisdictions, including Canada, the U.S., and certain EU Member States, there are also serious potential personal exposures for the individual representatives of the institutional investor as well as the company executives.

- ***Compensation.*** Compensation systems can potentially encourage management personnel to maximize industry profitability instead of the company's own profitability. For example, publicly-traded firms often compensate executives through stock options, and it has been argued that share prices can be driven more by industry performance than by individual firm performance. However, plausibility of the compensation systems mechanism has been questioned for several reasons. For example, a firm which competes more aggressively and effectively than its rivals may achieve higher profitability and stock prices than its rival. Moreover, one or more significant competitors that are not adhering to a "soft competition" approach can result in other rivals competing more vigorously to avoid reductions of their sales, profits and stock prices. In addition, management's incentives to operate in ways which benefit the publicly-traded rivals with common shareholders could well be in tension with similar incentives to not injure publicly-traded customers whose shareholders include common institutional investors.

- ***Reduced Pressure to Compete.*** It has been suggested that institutional investors with common shareholdings in competing firms have less incentive to pressure managers to compete vigorously, and managers in turn are less likely to expend the effort to compete vigorously. However, this mechanism is more vague than the direct communications or compensation systems mechanism and is subject to similar uncertainties in practice.

A further issue that has received little attention is whether and how the senior management who are assumed to be responding to communications from and the interests of common institutional shareholders would implement instructions or incentives to compete softly to the relevant lower level managers responsible for day-to-day decision-making in specific relevant product and geographic markets. Even if senior management were to accept shareholder preferences for less competition, it cannot simply be assumed that there would be transmission to and adherence by the numerous line managers that make pricing or other competitive decisions.

Where common shareholdings exist, the functioning of the foregoing mechanisms should be testable. A review of pre-merger evidence regarding whether mechanisms of competitive harm have been operative has the potential to be informative in a merger review two ways. In the absence of such evidence, some theory of harm and supporting evidence regarding the likelihood of these mechanisms emerging post-merger would be necessary to demonstrate that the common shareholdings are likely to result in the merger having anti-competitive effects. Conversely, pre-merger evidence that such mechanisms are operative would suggest that they are likely to continue to operate post-merger. In order to attribute anti-competitive effects to the merger, there would need to be a basis for expecting that the mechanisms would have materially greater effects on competition if the merger proceeded, relative to the likely effects in the absence of the merger.

The resource burdens of undertaking this type of analysis are likely to be significant. The competition authority would need to obtain and analyze information about shareholder votes, direct communications, compensation systems and reductions in competitive pressure, as well as the extent of transmission from senior management to line managers. The scope of this analysis would need to include the various competing firms with the common shareholders, in addition to the merging parties. Regardless of whether the competition authority undertakes this analysis proactively, it can be expected that merging parties would develop advocacy submissions to attempt to rebut such theories.

## VII. CAUSATION

The appropriate approach for evaluating the competitive effects of a merger is to compare the likely levels of prices (and/or non-price dimensions of competition) if the merger occurs against the levels that would likely prevail in the absence of the merger transaction (often described as a "but-for analysis"). Under such an approach, the focus is on whether the merger is expected to result in some preservation or enhancement of market power, relative to the non-merger scenario (which is often assumed to resemble the pre-merger conditions).

### *A. Pre-Merger Market Power*

The common shareholdings literature predicts that there would already be soft competition between the merging parties, the other competitors and the potential supply responders who have common shareholders (and that such behaviour would be expected to continue absent the merger). It would therefore be necessary to assess whether the nature or extent of the unilateral anti-competitive behaviour and/or accommodating behaviour would be likely to increase materially as a result of the merger, and thereby facilitate a greater degree of market power being exercised than was already occurring pre-merger.

*B. Effect of the Merger*

The pre-merger to post-merger increase in an HHI or MHHI measure is one potential indicator that a merger may have market power implications. However, there is no clear standard that connects any particular level of increase in concentration measures to any particular degree of ability to exercise market power. Moreover, such calculations are market-wide aggregates that do not specifically address how any particular current competitor or potential supply responder is likely to behave.

As discussed above, in order to reliably assess whether common shareholdings are likely to result in less competitive discipline on merging parties, considerable evidence about the firms linked by common shareholdings is likely to be required. More specifically, competition authorities to gather and analyze evidence regarding:

- The extent to which the merging parties were providing meaningful competitive discipline on each other pre-merger, having regard to any common shareholders.

- The likelihood and degree to which the remaining publicly-traded competitors with common shareholders are going to become more accommodating than they were pre-merger.

- The likelihood and degree to which one or more firms with common shareholders that were going to reposition/expand/enter/innovate in the absence of the merger would choose not to do so as a result of the merger.

- The extent to which there are existing competitors, buyers with countervailing power and/or or supply responders, without common shareholders, that would provide competitive discipline on attempts to exercise an incremental level of market power post-merger.

Competition authorities may consider that, in an environment where competition is already soft and market power is being exercised pre-merger, any further lessening of the level of competition that does exist could be a concern. However, as a matter of law, it will still be necessary to apply the general SLC or SIEC merger control test on an appropriate, proportional and non-discriminatory basis. A specific merger is not problematic unless the likely magnitude of change in the extent to which market power may be exercised is "substantial lessening" of, or a "significant impediment" to, competition.

*C. Inherent Conflict in the Theory of Harm of a Merger Case*

In most cases, it will be difficult to reconcile an assertion that pre-merger common shareholdings are significant and that a merger among two of the firms in such an industry will cause material negative competitive effects. This tension can be seen in *Dow/Dupont*. Annex 5 of the Commission's decision set out a detailed summary of the theoretical and empirical literature about the potential market power effects of common shareholdings. Due to procedural issues arising in the statement of objections process, the Commission decided that it would not base its decision on MHHIs and the common shareholdings analysis. Instead, it commented that "common shareholding in the agro-chemical industry is to be taken as an element of context in the appreciation of any significant impediment to effective competition that is raised in the Decision."[21]

In the context of "innovation competition" in respect of research and early pipeline products targeting the same product markets, in *Dow/Dupont* the Commission also observed that the significant level of common shareholdings among large agro-chemical companies "provide indications that innovation competition in crop protection should be less intense as compared with an industry with no common shareholding."[22] However, the Commission did not explain whether or *how the merger would change* the extent to which common shareholdings in the agro-chemical industry diminish innovation competition.

This approach allowed the Commission to avoid undermining its own primary theories of harm. Had it placed greater reliance on the degree of industry concentration resulting from common shareholdings, it would have introduced significant internal contradictions into its competitive effects analysis. No explanation was provided as to how the aggressive current competition findings and the innovation/new product competition findings could be reconciled with the significant common shareholdings between Dow, Dupont and the other major competitors. If the common shareholdings analysis was sound, the pre-merger competitive environment would already be characterized by soft competition, with market power being exercised by the merging parties and the other major competitors identified in that analysis. There would then be no basis for finding that the merger would be expected to cause an SIEC.

21 *Dow/Dupont*, para. 81.

22 *Dow/Dupont*, para. 2352, and Annex 5, para. 60.

## VIII. CONCLUDING OBSERVATIONS

It is difficult to estimate how many mergers might be inappropriately allowed to proceed if common shareholdings are ignored. However, it is clear from merger review statistics in the major competition law regimes that anti-competitive mergers are rare. For example, in 2017 the CCB challenged 3 percent, the Commission challenged 6 percent and the U.S. Agencies collectively challenged 2 percent of the mergers that were reviewed.[23] The number of additional cases that are likely to arise using a common shareholdings theory of harm would be expected to be very rare, having regard to the causation, materiality and mechanism issues discussed above. Moreover, the impact of enforcement in such cases would likely be modest because only the incremented level of market power attributable to the merger would be addressed, while the pre-merger market power being exercised through common shareholdings would not be affected.

As noted above, the initial step of identifying common shareholdings in an industry would involve obtaining and analyzing shareholder register data from the merging parties plus all public companies in each relevant market that are current competitors; customers with potential countervailing power; and potential supply responders. Even after shareholder lists are obtained, the identification of common shareholdings may not be straightforward because some institutional investors use an array of separate funds or affiliated entities to hold investments.

Substantively, a rigorous assessment of the competitive effects of common shareholdings would then need to consider the likelihood of competitive versus accommodating behaviour by the same universe of firms (on an individualized, not a generalized basis) in the future if the merger occurs, relative to a counterfactual in which the merger does not occur. This would consume significant additional agency, merging party and third-party resources related to data gathering and analysis, document production and review, third party market contacts, and the development and evaluation of merging parties' advocacy submissions. Moreover, if common shareholdings are a significant feature of the market both pre-merger and post-merger, enforcement action may have minimal impact.

Competition authorities should therefore consider very carefully whether the benefits from the potential identification and remediation of an occasional merger that is dependant on the analysis of common shareholdings (i.e. that could not have been challenged otherwise) would be expected to exceed the potentially substantial costs to agencies, merging parties and third parties from incorporating this additional analysis into merger review processes. Analysis of common shareholdings analyses will likely be a giant waste of time, benefiting the advisors who assist companies (or complainants) with merger reviews while potentially overwhelming resource-constrained enforcement agencies and, more importantly, having a net negative effect on economic welfare. In an environment of scarce enforcement resources, the case for expanding merger review to include common shareholdings is even weaker, as most competition authorities are likely to have other areas where they can make large positive contributions to improving economic welfare.

23 Global Competition Review, "Rating Enforcement" (2018), available at https://globalcompetitionreview.com/edition/1001254/rating-enforcement-2018.

# "MULTI-HOMING BY ALL MEANS": RUSSIAN COMPETITION POLICY TOWARDS DIGITAL PLATFORMS

BY SVETLANA AVDASHEVA[1]

1 Applied Economics Department, National Research University Higher School of Economics, Moscow. This article reflects the author's presentation at the 14th International Conference on Competition and Regulation (CRESSE 2019). The author thanks William Kovacic and all the participants in the CRESSE Special Policy Session on Enforcement Developments in Digital Markets in BRICS. The author acknowledges support from the Basic Research Program of the National Research University Higher School of Economics.

# I. INTRODUCTION

Competition policy in digital markets, and, in particular, towards multi-sided platforms, remains a controversial issue.[2] On the one hand, the sheer size and persistent growth of the largest participants in digital markets, and their impact on adjacent markets, create competition concerns. On the other hand, the innovation-intensive business models of digital multi-sided platforms provide strong arguments in favor of the views that, first, innovation and "creative destruction" are sufficient to protect competition without any specific enforcement, and, second, in innovative industries, excessive competition enforcement may result in significant unintended distortions, reducing consumer benefits and total welfare. Along with the ambiguous predictions of certain theories of harm, there have been contradictory assessments of recent and on-going competition interventions in the sector.[3]

Russian competition enforcement is interesting in this respect for several reasons. First, the Russian competition authority, the Federal Antimonopoly Service ("FAS"), is among the most active in the world, with an extensive enforcement record. Second, in the scheme of FAS enforcement activity, decisions against abuse of dominance abound, and include decisions based on both exclusionary and exploitative theories of harm.[4] Third, in light of the first two reasons, the Russian Google Android decision, which was issued in 2015, three years before the similar 2018 European Commission decision, is interesting to analyze. Does the FAS develop specific theories of harm in competition enforcement? Do these specific theories of harm rely on exploitative effects (harm to counterparties) rather than on exclusionary ones?

Professor Van den Bergh considers the Russian Google Android decision to be deficient in terms of effects-based analysis, noting:

> The FAS may be criticized for not having undertaken a detailed analysis of consumer harm and rapidly dismissing the efficiency defense advanced by the U.S. firm. The decision has not proven that Google's practices reduced effective competition in the market, thereby harming consumers. As a consequence, the FAS appears to protect Google's competitors, in particular Yandex, rather than to foster competition or increase long-run consumer welfare.[5]

The goal of this paper is to summarize the enforcement record of the FAS in digital multi-sided platforms (as well as the use of digital remedies in primarily non-digital markets) in order to explain the theories of harm that the FAS uses in both competition enforcement and merger control. First, the paper will discuss antitrust enforcement: (1) the 2015 Google Android decision (in a case similar to the EU Commission's investigation into the same conduct); and (2) the 2017 Microsoft case concerning compatibility with competing developers' applications. Second, it will discuss two merger control decisions, concerning (1) the 2017 joint venture agreement between Uber and Yandex in digital cab-hailing; and (2) the 2018 Bayer-Monsanto merger, where a significant portion of the remedies addressed digital aspects of the business. In each case, the theory of harm either explicitly or implicitly used by the FAS is central to the analysis. The paper, in short, seeks to check if the theories of harm used by the FAS differ from the conventional approach to platforms.

# II. CONTEXT: RUSSIAN COMPETITION ENFORCEMENT IN DIGITAL PLATFORMS

Three important features of the Russian digital sector and Russian competition enforcement are important to explain FAS enforcement policies towards digital platforms.

First, in Russia, there are relatively few large digital market participants of domestic origin. Only Yandex, the largest Russian company in the digital sector, exceeds USD 10 billion in valuation, in contrast to, for example, China, which has about twenty companies larger in size. At the same time, the number of employees in the digital sector in Russia is comparable to that in Europe. Most Russian companies are small or medium sized. This is why any impact on Russian rivals is usually measured as an effect on a small number of (relatively) large companies.

---

2 See, for instance, Collyer, K., Mullan, H., & Timan, N.," Measuring market power in multi-sided markets. Rethinking Antitrust Tools for Multi-Sided Platforms" (2018, available at https://www.oecd.org/daf/competition/Rethinking-antitrust-tools-for-multi-sided-platforms-2018.pdf

3 Compare, for instance: Falce, V., *Digital Disruption, Innovation and Competition Law. How the Google Shopping Case is Fitting the Framework?*, Rivista Italiana di Antitrust/Italian Antitrust Review, *2*(3); Díaz, P. S. (2017). EU *Competition Law Needs to Install a Plug-in*, World Competition, 40 (3), 393-420; Iacobucci, E., & Ducci, F. (2019). *The Google search case in Europe: tying and the single monopoly profit theorem in two-sided markets*, European Journal of Law and Economics, 47(1), 15-42.

4 Avdasheva, S., *Models of monopoly in the quarter-century development of Russian competition policy: Understanding competition analysis in the abuse of dominance investigation*, in *Competition law enforcement in the BRICS and in developing countries* (pp. 239-262). Springer (2016).

5 Van den Bergh, R. J., *Comparative Competition Law and Economics* (2017) Edward Elgar Publishing, pp. 328-329.

Second, Russian competition enforcement is very proactive, and prioritizes the deterrence of exploitative conduct. Disadvantaging rivals might be sufficient evidence of violation of the law on "protection of competition." Most of the extremely large number of Russian abuse of dominance decisions (several hundreds annually recently, and up to three thousand decisions several years ago), explicitly concern exploitative conduct towards consumers and/or rivals. One explanation for this is that a large proportion of competition enforcement targets in Russia are so-called "natural monopolies" that control "essential facilities," and are thus able to restrict competition in downstream markets. Of all companies investigated for abuse of dominance in Russia, Gazprom is the undisputed leader, in terms of the number of decisions, warnings, precautions, and remedies addressed against it.

The FAS is often criticized both by domestic and international experts for opening too many investigations despite its limited resources, resulting in decisions lacking in economic analysis. However, when considering companies dominant on networks (so-called 'natural monopolies'), many experts (not only Russians) consider timely intervention preferable to drawn-out investigations.

Third, the FAS routinely uses remedies and quasi-remedies in merger control and in abuse of dominance investigations. Classical remedies for violations of competition law are complemented by specific *ex-ante* requirements for dominant companies, including in markets where such companies have not been found to infringe competition law.

Therefore, in antitrust investigations and merger control in digital markets, one may reasonably expect there to be "exploitative" theories of harm, and remedies aimed at protecting specific groups of competitors.

## III. THEORIES OF HARM AND REMEDIES IN ANTITRUST ENFORCEMENT

Two recent cases concerning digital platforms in Russia are the 2015 Google Android "bundling" case ("Google Russia"), and the 2017 Microsoft compatibility case ("Microsoft Russia"). Both were initiated on the basis of complaints by Russian competitors in downstream markets.

### *A. The Russian Google Android Decision (2015)*

The terms of Google's agreements with mobile device manufacturers were at the center of Google Russia investigation. These terms concerned the pre-installation of the Google Play app store, which was bundled with other Google mobile applications, on mobile devices. Revenue sharing agreements ("RSAs") between Google and Android device manufacturers made it profitable for manufacturers to pre-install the bundle of Google Mobile Services ("GMS") applications, and at the same time refuse to pre-install competing applications. The largest Russian application developer, Yandex, submitted a complaint to the FAS, citing evidence showing decreases in the shares of rivals in different application segments. For instance, in search applications, Yandex's share decreased from more than 60 percent in 2014 to less than 40 percent after manufacturers entered into so-called anti-fragmentation requirements ("AFRs") and RSAs with Google.

After half a year of investigation (this period would be considered to be too short for most competition authorities, but is normal in Russia), the FAS issued an infringement decision imposing remedies,[6] holding that Google was abusing a dominant position through anticompetitive bundling. The theory of harm was based on causal links between Google's RSAs and AFRs, on the one hand, and the refusal of manufacturers to pre-install competing applications, on the other hand. AFRs favor refusal by manufacturers to pre-install other apps. RSAs provide additional benefits to manufacturers that comply with AFRs. The FAS concluded that bundling Google Play (where Google was found to be dominant) with other GMS applications restricted market access and could squeeze out undertakings competing with Google. Pre-installation combined with default requirements, enforced by contractual restrictions with exclusivity effects, limited the ability for competing applications to gain traction. On this basis, the theory of harm in this decision does not substantially differ from that in the EU Commission's Google Android decision.

The FAS decision was criticized for not assessing any positive welfare effects of Google's strategies. This is true. However, it is also true that Google did not undertake substantial efforts to present evidence of such positive welfare effects during either the FAS investigation or the subsequent judicial review of the FAS decision. In Google's claim to annul the FAS decision, its arguments concentrated on weaknesses in the market analysis and product market delineation carried out by the FAS. In particular, Google claimed that operating systems ("OS") do not differ from other applications, which should be deemed to form part of the same relevant product market (and that therefore the FAS was incorrect to find that Google was dominant). It is not unusual that the reviewing court did not accept this line of defense.

6 Decision AD/54066/16, Case 1-14-21/00-11-15, October 5, 2015 (in Russian), available at https://br.fas.gov.ru/ca/upravlenie-regulirovaniya-svyazi-i-informatsionnyh-tehnologiy/ad-54066-15/.

After its unsuccessful attempt to annul the infringement decision, Google signed a commitment agreement with the FAS, obliging Google not to restrict the pre-installation of other developers' applications on Android mobile devices for a period of seven years, and to include options to choose between: (i) Google Chrome or competing browsers (including but not limited to Yandex); (ii) Google Play or Yandex.Market; and (iii) Google Maps or Yandex.Maps (or other mapping services). In turn, the monetary penalties imposed on Google were modest – less than USD 1 million.

***B. The Microsoft Compatibility Investigation (2017)***

The Microsoft Russia case concerned allegations that Microsoft discriminated against competing developers of anti-malware software. Specifically, the case concerned Microsoft's policies on the advance provision to competing software developers of so-called "release to manufacturing" (or "RTM") versions of its Windows 10 OS. Timely access to RTM OS versions is required to allow competing developers to update their anti-malware products to ensure compatibility with a new OS before its release.

Kaspersky Lab, one of the largest Russian anti-malware developers, submitted a complaint to the FAS, alleging that Microsoft provided the RTM version of Windows 10 to competing anti-malware developers only six days before the new OS was released. Second, Microsoft allegedly designed its Windows Defender security feature in a manner so as to induce users to favor Microsoft's own anti-malware products over those offered by competitors. The FAS found Microsoft's conduct to amount to an abuse of dominance by creating discriminatory conditions for rivals.

The investigation did not result in an infringement decision, because after receiving a formal "warning" (a specific type of procedure used by the FAS), Microsoft decided to comply with the warning's requirements. Under Russian competition legislation, compliance with warning requirements allows the FAS to terminate further investigations or proceedings.

In both Google Russia and Microsoft Russia, the FAS found the business strategies of digital platforms to amount to restriction of competition, but not as disadvantaging rivals as such. Competition is presumably restricted by vertical foreclosure. The content of anti-competitive conduct in both cases was such that protection of competition at the same time meant protection of competitors. In both cases, the FAS preferred rapid intervention with specific remedies and precautions over infringement decisions with large financial penalties. In both cases, the goal of decision was to prevent discrimination and to ensure equal access to downstream markets. In other words, the FAS strategy in many features resembles the regulation of a network operator (or a "natural monopoly").

## IV. THEORIES OF HARM AND REMEDIES IN MERGER CONTROL

Two merger control decisions allow us to analyze the approach of the FAS to potential adverse effects on competition arising from the enlargement of platforms through economic concentration. The first concerns a joint venture between the international taxi aggregator Uber and Russia's Yandex. The second concerns a merger between Bayer and Monsanto affecting global markets for seeds and pesticides. The first is a "genuine" digital example, while the second illustrates the attitude of the Russian competition authority towards the impact of digital solutions on competition in downstream (adjacent) markets.

***A. The Yandex-Uber Joint Venture (2017)***

The 2017 joint venture between Uber and Yandex ("Uber-Yandex") created the largest participant in the cab-hailing aggregator market in Russia. In approving the deal, the FAS did not find the merging company to be dominant. A partial explanation for this is that the FAS defined the relevant product market to be for services that connect drivers and passengers. As a result, traditional radio taxi services were considered to be close substitutes for aggregators.

Despite finding no serious competition concerns, the FAS nonetheless imposed remedies. Central to the remedies is a requirement to protect multi-homing: the companies committed not to restrict the use of alternative aggregator applications by taxi drivers using their service. It is difficult to predict the long-term effects of the transaction or the impact of the remedies. However, the short-run effects are interesting. Soon after the joint venture was approved subject to the multi-homing remedy, a new entrant, CityMobile, entered several Russian city taxi markets (including Moscow), with an aggressive pricing strategy.

The absence of restrictions on multi-homing has resulted in heterogenous market participants. Some taxi drivers are "branded" by aggregators (e.g. Yandex, CityMobile, Gett, RuTaxi, or other companies). Others contract with the same aggregators, but without branding. From the second group, there are drivers that share working time between different aggregators. Therefore, switching between providers is easy for both drivers and consumers.

Under these heterogenous conditions, pricing becomes an important predictor of market share. Specifically, CityMobile, during its first year of operation (2018), attained a 20-25 percent market share in the Moscow cab-hailing market. Due to steadily decreasing prices, the market volume is steadily increasing. At the same time, there has been a wave of smaller deals in the taxi aggregator segment in Russia, both between Yandex and smaller regional providers, and between other smaller companies. The short-run effect of multi-homing remedies has been tough price competition. At the same time, the market structure in almost all Russian cities is changing rapidly.

### *B. Digital Issues in the Bayer-Monsanto Merger (2018)*

The Bayer-Monsanto merger (a transaction concerning companies accounting for one-quarter of the world's sales of seeds and pesticides) caused competition concerns beyond the traditional markets for agricultural inputs (seeds, fertilizers, pesticides, etc.). One such area of concern related to "digital agriculture," which makes it possible for producers to plan and adjust necessary inputs in real time to maximize crop yield. The world's largest seed suppliers invest heavily in the development of IT platforms to provide decisional support for farmers. It is estimated that turnover in the digital agriculture market will reach USD 15 billion in 2021.[7]

According to the FAS merger decision, big data analysis and specialized software enable suppliers of traditional product portfolios (such as seeds and biopesticides) to offer one-stop solutions for farmers. Digital platforms also make effective bundling possible for suppliers of complementary inputs. Major suppliers of product bundles (such as the new Bayer-Monsanto entity) could strengthen their market power through the exclusionary use of IT platforms, thereby gaining the ability to engage in both exclusionary and exploitative anticompetitive behavior.

The remedies imposed by the FAS, in contrast to many other competition authorities, did not require divestitures of assets, but instead concentrated on fair, reasonable and non-discriminatory ("FRAND") conditions for the supply of products, the licensing of particular product innovations (such as molecular selection tools and the germplasm of the selected crops), and access to digital platforms, not only in terms of software, but also to information collected by platforms (termed "big data" in the FAS decision). In light of considerable market and technological uncertainty, the FAS did not specify the precise conditions under which such access should be granted, but instead appointed a Trustee that would be responsible for elaborating particular terms and monitoring compliance.

In both the Uber-Yandex and Bayer-Monsanto decisions, FAS' theories of harm concentrated on foreclosure issues. In Uber-Yandex, the threat of foreclosure arose because of potential single-homing requirements, and the remedies explicitly sought to prevent them by protecting multi-homing. In Bayer-Monsanto, big data collected by a digital platform were, in essence, considered to be equivalent to an essential facility[8] that should be available to different market participants on a non-discriminatory basis in order to prevent foreclosure.

The Uber-Yandex decision favored competition in the market, at least in the short-run. As for the remedy in Bayer-Monsanto, it might seem extremely protectionist, but this also might not be the case. The remedies only establish a framework that is to be further specified.

---

7 PA Consulting, "Digitizing Agriculture," 2015, available at https://www.paconsulting.com/insights/2015/digitising-agriculture/.

8 The notion of essential facilities is absent from Russian competition legislation. However, a large number of decisions, including decisions on digital platforms, essentially follow the logic of this concept.

## V. CONCLUDING REMARKS

During the last few years, the FAS has addressed record numbers of investigations and merger approvals that involve digital platform issues.

In investigations of anticompetitive conduct, which typically involve alleged abuse of dominance, vertical foreclosure is at the center of the theories of harm. The FAS has never issued a decision based on purely exploitative conduct by a digital platform, i.e. where the unfairness of contract terms for the final customer was found to be a sufficient condition for liability.

It is true that FAS decisions do not contain explicit assessments of efficiencies. One formal reason for this is that certain types of violation are illegal *per se* (including, for instance, the conduct in Google Russia). Another limitation on efficiency analysis arises from the fact that national authorities, when analyzing welfare effects, concentrate only on domestic markets. Given the global presence of a digital multi-sided platforms, efficiencies captured by a platform would be missing from the analysis.

Remedies, both for anticompetitive conduct, and in merger control, address inter-platform as well as intra-platform competition. A typical remedy promoting inter-platform competition would be a multi-homing protection (such as in Uber-Yandex). Multi-homing by end customers is also an important issue for remedies protecting intra-platform competition. By requiring fair and non-discriminatory terms for competing "unbundled" sellers to supply competing services using a platform (such as in Google Russia and Microsoft Russia), the FAS treats platforms as essential facilities. Therefore, multi-homing protections are a universal remedy used in both antitrust investigations and in merger control. In this respect, the Russian approach contradicts neither the economic theory of competition in digital platform markets nor the approach of mature competition jurisdictions.

# THE EVOLUTION OF COMPETITION LAW IN DIGITAL MARKETS IN INDIA

BY AUGUSTINE PETER & NEHA SINGH[1]

1 Augustine Peter is Former Member of the Competition Commission of India and Neha Singh is a Competition Law Expert. The authors can be reached at apeter1900@gmail.com and advocate.nehasingh@gmail.com. Views are strictly personal.

# I. INTRODUCTION

In step with global developments, Indian markets have been rapidly changing, characterized by the adoption of new technologies and innovation in almost all sectors of the economy. With recent disruptive policies including demonetization and the thrust towards digitalization, e-commerce has seen sudden growth in India. Online retail sales alone in India were expected to have reached U.S. $32.7 billion by 2018, led by Flipkart, Amazon India, and Paytm Mall.[2] With e-commerce projected to increase at a compound annual growth rate ("CAGR") of 44.77 percent as recently as 2016, and to reach U.S.$ 63.7 billion by 2020, India is one of the world's fastest growing retail markets.

Competition law has a broad and deep role to play in these fast-changing market conditions. Indian competition law, under Section 3 of the Competition Act, 2002 (the "Act"), deals with anticompetitive agreements. While Section 3(3) specifically deals with horizontal agreements, Section 3(4) covers vertical agreements. Section 4 addresses issues related to abuses of dominance. Sections 5 and 6 deal with regulation of mergers, amalgamations, and acquisitions ("combinations").

The touchstone of antitrust assessment under the Act is an appreciable adverse effect on competition ("AAEC") test. This test is not defined in the Act, although Section 19(3) sets out factors to be taken into account by the Competition Commission of India (the "Commission") to decide on the existence (or not) of an AAEC, as far as agreements are concerned.

The Commission started enforcing antitrust rules on May 20, 2009. Enforcement of combinations started on June 1, 2011. In the decade-long enforcement history of the Commission, major sectors where antitrust actions have been taken include pharmaceuticals, real estate, civil aviation, the financial sector, electricity, digital markets, sports and entertainment, as well as public procurement.

The jurisprudence on horizontal and vertical agreements in the digital and e-commerce sector in India has been largely limited, owing to the fact that the Act is still relatively young. Questions have often been raised as to the adequacy of Indian law to address suspected competition issues related to digital and e-commerce markets.

# II. ANTICOMPETITIVE AGREEMENTS

Anti-competitive agreements traditionally fall in two broad categories - horizontal agreements and vertical agreements. Certain horizontal agreements that cause deadweight losses to all stakeholders and bring benefits only to their perpetrators are classified as "hardcore" cartels. Vertical agreements are agreements between economic players at different levels in the value chain, and are not treated as anticompetitive unless the Commission finds that they cause or are likely to cause an AAEC in India. A distinct category of cartels containing a mix of horizontal and vertical agreements, i.e. "hub-and-spoke" arrangements, have been alleged before the Commission only in a limited number of cases.

The essence of a hub-and-spoke cartel is that competing firms, instead of communicating directly between themselves, do so through a third party with which they have a vertical relationship. In a hub-and-spoke cartel, the spokes are connected to the hub, while the hub fulfils the role of a "serving hatch."[3] The spokes (also referred to as the "rim"), are competitors horizontally colluding amongst themselves, and the "hub" is an upstream supplier or downstream customer[4] that facilitates collusion between the spokes. These arrangements consist of both vertical and horizontal agreements at the same time, with horizontal coordination occurring between the spokes to adhere to terms set out by the hub, and a vertical agreement between the hub and each spoke individually.

While some direct communication between the spokes may take place, indirect communication through a hub is the quintessence of such an arrangement. For instance, in the Apple e-books case in the U.S., the court found that Apple had orchestrated a horizontal conspiracy among five leading publishers in the U.S. by entering into individual agreements with each, leading to an increase in the prices paid by consumers for e-books.[5]

---

2 A. Peter & N. Singh, *Online Vertical Restraints and Abuse of Dominant Position: The Emerging Indian Perspectives* in *Global Competition Law Enforcement: New Players and New Challenges*, (Eds) Kovacic & Buccirossi, Kluwer (2019).

3 *JJB Sports plc v. Office of Fair Trading*, Case 1022/1/1/03 [2004] CAT 17, para 141.

4 Harrington Jr, Joseph E., How Do Hub-and-Spoke Cartels Operate? Lessons from Nine Case Studies (August 24, 2018), available at https://ssrn.com/abstract=3238244.

5 *United States v. Apple, Inc.*, 791 F.3d 290, 314 (2d Cir. 2015).

In India, a hub-and-spoke cartel was alleged in *Jasper* v. *Kaff Appliances*.[6] It was alleged that Kaff issued a notice stating that Kaff's goods sold on Jasper's online marketplace, Snapdeal, were spurious and that Kaff would not honor warranties on products sold through Snapdeal. Jasper alleged that Kaff's action, in discriminating against the online sale channel, was a hub-and-spoke arrangement between Kaff and retail outlets. Jasper also alleged that an e-mail clearly revealed that Kaff was attempting to impose a price restriction in the form of a Minimum Operating Price ("MOP") on Jasper's website, designed to force sales to be made at a minimum price, and that Kaff threatened to ban online sales if such prices were not maintained. However, the directions to the Director General ("DG") of the Commission for investigation were based on a violation of Section 3(4)(e) of the Act relating to resale price maintenance ("RPM") only, and the issue of a possible hub-and-spoke conspiracy was not examined by the Commission.

In digital markets, algorithms can be employed to limit competition through agreements, concerted practices, and other subtle means. In *Samir Agrawal v. ANI Technologies*,[7] the Commission had the opportunity to decide whether the use of the same algorithm by the drivers of Ola/Uber through the use of a common platform amounted to cartelization under the Act. It was alleged that the Opposite Parties ("OPs"), i.e. Ola/Uber, acted as "hub" used by the competing drivers (the "spokes") to collude on prices. The Commission took the view that although the drivers may have followed the prices determined algorithmically by the platform (Ola/Uber), this could not be deemed to amount to collusion between the drivers. The Commission observed that a hub-and-spoke cartel would require an agreement between all drivers to set prices through the platform, or an agreement for the platform to coordinate prices between them, but there did not appear to be any such agreement between drivers themselves to delegate pricing power to the platforms or cab aggregators.

In the e-commerce sector, the Commission has had the occasion to assess certain allegations brought by informants as cases of exclusive distribution under Section 3(4). In *Ashish Ahuja v. SanDisk*,[8] the Commission investigated allegations against Snapdeal, an e-commerce portal, and SanDisk Corporation, a manufacturer of electronic storage devices. SanDisk insisted that only its authorized online channel partners could sell its products through Snapdeal. The informant alleged that Sandisk and Snapdeal entered into an agreement to prevent the informant from selling certain Sandisk products, and that such an arrangement violated Section 3 of the Act, as the conduct of the OPs was intended to force the informant to become a Sandisk authorized dealer. The Commission held that SanDisk was within its rights to protect the integrity of its distribution channel.

In *Mohit Manglani v. Flipkart and Ors*,[9] it was alleged that e-commerce websites and product sellers entered into exclusive agreements to sell the selected product exclusively on the selected portal to the exclusion of other e-portals or physical channels. It was also alleged that each e-portal had a 100 percent market share for the product it was exclusively dealing, leading to dominance. The Commission did not find any foreclosure, as most of the products the informant identified as being sold through exclusive e-partners (the OPs) were facing competitive constraints. The informants' contention that the conduct caused an AAEC was rejected on the ground that through the option of home delivery, consumers had the opportunity to receive the purchase at their convenience, which saved them precious time compared to visiting brick-and-mortar retail outlets. As regards allegations pertaining to Section 4, the Commission dismissed the informant's allegation that each exclusive product sold by each e-portal could be taken to constitute a relevant market in itself.

The issue of RPM as such is not novel. RPM can be understood as any agreement to sell goods on the condition that the price to be charged for resale by the purchaser must be that stipulated by the seller, unless it is clearly stated otherwise. Multiple cases of offline RPM have been dealt with by the Commission, including *M/s ESYS Information Technologies v. Intel Corporation*,[10] *Ganashyam Das Vij v. Bajaj Corp.*,[11] *Shubham Sanitary*,[12] and *Prime Magazine v. Wiley*.[13]

The digital era has introduced new challenges, such as situations where RPM clauses used in online channels are adopted by manufacturers with the strategic intent to increase prices rather than to serve consumers. RPM restrictions imposed on certain online retailers tend to have a broader impact on overall online price levels in the industry, as most online retailers also use pricing algorithms to automatically adapt

6 Case No 61 of 2014, Competition Commission of India.

7 Case No 37 of 2018, Competition Commission of India.

8 Case No 17 of 2014, Competition Commission of India.

9 Case No 80 of 2014, Competition Commission of India.

10 Case No 48 of 2011, Competition Commission of India.

11 Case No 68 of 2013, Competition Commission of India.

12 Case No 09 of 2015, Competition Commission of India.

13 Case No 07 of 2016, Competition Commission of India.

retail prices to those of competitors. In dealing with online RPM cases, the Commission has maintained the view that in digital markets and online platforms, the customary structure may not be present in every situation, especially in constantly evolving markets, and that any entity/firm contributing value to a product/service will be deemed to be a part of the value chain[14].

The Commission, in its order in *Jasper v. Kaff*,[15] hinted that Section 3(4), which lists RPM as a potentially prohibited vertical restraint, is fully equipped to deal with all substantial issues pertaining to online RPM. In this case, the Commission ordered an inquiry into alleged RPM by Kaff with respect to the sale of kitchen appliances. Kaff warned Jasper that if it did not maintain the market operating price ("MOP") of Kaff kitchen appliances, Kaff would not allow their sale on the marketplace. It is noteworthy that the investigation was limited to the issue of RPM and did not touch upon any refusal to deal allegations.

*Fx Enterprises v. Hyundai*[16] was the first case where the Commission directly ruled on RPM, holding that a restriction imposed by Hyundai on the maximum permissible discount that may be given by a dealer to end-consumers amounted to RPM in violation of the Act, and imposed a fine of Rs. 870 million. It was alleged, *inter alia*, that Hyundai imposed a "discount control mechanism," through which dealers were only permitted to provide a maximum permissible discount, prohibiting them from giving discounts to consumers above a recommended range. The Commission was of the view that Hyundai sought to impose an arrangement resulting in unlawful RPM, which included monitoring of the maximum permissible discount level through the discount control mechanism. It is noteworthy that such a discount control mechanism is of special importance in RPM cases in digital e-commerce markets. Such mechanisms or other sophisticated monitoring tools make RPM easier to sustain in online markets by allowing manufacturers to effectively track resale prices and to intervene swiftly in case of deviations from the imposed prices.

No occasion has yet arisen for the Commission to pronounce on so-called Internet Minimum Advertised Price ("IMAP") or Most Favored Nation ("MFN") clauses.

## III. ABUSE OF DOMINANT POSITION

Section 4 of the Act prohibits abuses of a dominant position, and defines dominance as a position of strength enjoyed by an enterprise, enabling it to act independently of competitive forces prevailing in the market, or to affect competitors or consumers in its favor. The approach towards assessment of abusive conduct under Indian law is based on whether the dominant enterprise engages in exclusionary or exploitative conduct in the form of unfair or discriminatory prices and/or conditions, leveraging, or denial of market access.

Digital platforms are characterized by the gathering of user data, high upfront sunk costs, economies of scale, and low marginal costs. The drive to build large data banks, along with control of such data, may encourage digital platforms to expand into other related businesses.[17] Taken together, such factors may be sufficient to confer market power on such platforms, enabling them to engage in anticompetitive conduct.

In general, any type of behavior that constitutes an abuse in an offline industry is also likely to constitute an abuse online. The competitive strength of online businesses is increasingly being determined by the amount, variety and quality of the data they hold. Big data, a relatively recent phenomenon, is important in the digital world, as it is a necessary input for a variety of products and services competing with (or complementary to) the services offered by incumbent providers of services such as online search engines, social networks and e-commerce platforms. On the other hand, big data may also offer significant benefits[18] to consumers, such as improved quality, customized products and services at low prices, and enhanced innovation.

In *Matrimony v. Google*[19] ("*Google I,*") the Commission observed that the large volumes of information generated from searches conducted on such platforms constitute such "big data," enabling search platforms to attract advertisers, target relevant advertisements, and conduct their search business. At the same time, the Commission was mindful of the fact that big data does not come without a cost, and that consumers may be increasingly facing a loss of control over their personal data, while exposing themselves to intrusive advertising and behavioral discrimination.

14 *Jasper v. Kaff Appliances*, Case No 61 of 2014, Competition Commission of India.

15 Case No 61 of 2014, Competition Commission of India.

16 Case No 36 & 08 of 2014, Competition Commission of India.

17 Competition issues in the digital economy, Note by the UNCTAD secretariat, May 1, 2019.

18 D. Daniel Sokol & Roisin Comerford, Antitrust and Regulating Big Data, 23 Geo. Mason L. Rev. 1129 (2016).

19 Case No 7 & 30 of 2012, Competition Commission of India.

Such big data has the potential to be an entry barrier when online platforms collate a vast amount of data capable of being processed at high speed. In online aggregator business model, prevalent in unorganized and highly populated sectors such as hotels, taxis, etc., an aggregator company provides aggregation services under their brand. Such aggregators may refuse to grant data access to affiliates offering the same products on their own websites, often leading to disputes between the two. Since online multi-sided platforms do not rely on physical infrastructure, the internationally recognized "essential facilities" doctrine may need to be modified to apply to data accessibility or ranking by online competitors.

Section 4 of the Act can be interpreted to recognize the essential facilities doctrine as a form of exclusionary anticompetitive conduct, through which a dominant enterprise refuses to grant access to a type of infrastructure or other form of facility that rivals need in order to compete. The doctrine has been examined by the Commission in the cases of *Arshiya Rail Infrastructure Limited (ARIL) v. Container Corporation of India (CONCOR)*[20] and *Shamsher Kataria v. Honda Siel.*[21] The Commission has, however, not yet been faced with a situation where big data would be an essential facility, i.e. a situation where online platforms would have the ability and incentive to erect entry barriers and maintain dominance, by limiting access to or refusing to share data that would be an important tool for competing platforms.

The fact that digital markets are often two/multisided with strong network effects can pose a challenge to the traditional approach to market definition, rendering it difficult even for experienced competition authorities to define the relevant market. As regards offline vs. online sales, the Commission, in *Ashish Ahuja v. SanDisk*,[22] held that they were merely different distribution channels for the same product, and hence were not two different relevant markets. In reaching this conclusion, the Commission had regard to the fact that both offline and online channels can differ in terms of discounts and shopping experience, and buyers weigh the options available in both to come to a final purchase decision. If the online price increases significantly, then the consumer is likely to shift to offline outlets, and *vice versa*. The same view was taken in *Deepak Verma v. Clues Network*,[23] and *Confederation of Real Estate Brokers Association of India v. Magicbricks.com.*[24]

It was argued by Google in *Google I* that the DG's definition of the relevant market ought to have included offline advertising. However, the Commission was of the view that online and offline advertising services are not comparable. Also, in *Google I*, the Commission held that online general web search services cannot be equated with specialized search services, and consequently held online general web search services to be a distinct relevant product market.

One of the questions often raised in two-sided/multisided platforms is whether the relationship between the platform and the respective market sides should be considered to be separate or whether there is a single market. In *RKG Hospitalities v. Oravel Stays*,[25] the Commission highlighted the fact that OYO and other similar players primarily operate as two-sided platforms connecting budget hotels with potential consumers. On one side, they serve budget hotels and on the other side they serve potential consumers looking for budget accommodation. The Commission held that since that case pertained to a complaint raised by a partner hotel, the relevant product market determination needed to take into account all alternatives available to such budget hotels, and the competitive constraints faced by the focal product, i.e. the service provided by OYO. The Commission noted that what OYO offers to budget hotels is essentially a franchising service comprising a bouquet of services, which enables the franchisee hotels to reap the benefits of the OYO brand (in return for a commission or share in revenues), while ensuring minimum monthly guaranteed revenues to the partner hotel. In this light, the Commission defined the relevant product market to be the "market for franchising services for budget hotels."

Platform markets also raise the issue as to whether there are circumstances under which a market can be viewed in isolation from the other side, or whether the interplay between both sides is always to be taken into account.[26] In *Google I* it was held by the Commission that the two sides of the market described above complement each other and are interdependent.

Another issue in defining relevant markets for online platforms is that the traditional SSNIP test may not be a practical tool, as the platform may argue that they provide free products or services. Google raised this argument in *Google I*, but the Commission rejected it, holding that

---

20 Case No 64 of 2010 & 12 of 2011, Competition Commission of India.

21 Case No 03 of 2011, Competition Commission of India.

22 Case No 17 of 2014, Competition Commission of India.

23 Case No 34 of 2016, Competition Commission of India.

24 Case No 23 of 2016, Competition Commission of India.

25 Case No 03 of 2019, Competition Commission of India.

26 D. Daniel Sokol & Roisin Comerford, Antitrust and Regulating Big Data, 23 Geo. Mason L. Rev. 1129 (2016).

users offer indirect consideration to Google by providing their attention (or "eyeballs") to the Search Engine Results Page ("SERP,") and allowing Google to collect and use their information. Also, Google argued that consumers incur near zero search costs when gathering information for purchase decisions online, and that there is no purchase or sale of goods or services, as Google provides search services to users free of cost. This argument was rejected by the Commission, observing that several mobile applications/websites work through an advertiser funded model, but this does not imply that users do not provide any consideration for using these products and services.

It is noteworthy that the definition of price under Section 2(o) of the Act defines "price" as including any "valuable consideration," whether it is "direct or indirect, or deferred, and includes any consideration which in effect relates to the sale of any goods or to the performance of any services although ostensibly relating to any other matter or thing. This definition is wide enough to reject Google's argument by including personal data, attention, and revealed preferences as "valuable consideration."

Predatory pricing, as per the Indian Act, is the sale of goods or services at prices lower than the cost of production, as defined in the CCI (Determination of Cost of Production) Regulations, 2009, with the intent to reduce competition or eliminate competition or competitor(s). In India, the abuse of predation involves pricing below cost and predatory intent. This is unlike the situation in the U.S., where besides pricing below cost, there is also a "recoupment" test which must be satisfied for a finding of predation. Specifically, in the U.S., the plaintiff must prove that the defendant had a "dangerous probability of recouping its investment in below cost prices."

In India, allegations of predatory pricing have been raised against firms operating ride sharing/aggregator business models by traditional incumbent taxi companies whose businesses have been disrupted by aggregators. The Commission in *Fast track Call Cab/Meru v. ANI Technologies*[27] rejected ANI technologies' argument that it was merely a technology software service provider, holding that it is a radio taxi service provider. However, despite its high market share of 60-70 percent, ANI Technologies was not found to be dominant, due to Uber posing strong competitive constraints (the Commission noted that the incumbents were left catching up with a new entrant armed with a new technology which allowed it to arrogate to itself a large unmet demand).

During the investigation, Uber, which entered the relevant market in 2013-14, expanded its network rapidly to account for nearly one third of the active fleet in 2015-16. In terms of annual number of trips, its share increased from 1-2 percent in 2013-14 to 30-31 percent in 2015-16. Finally, the Commission did not see the need to intervene, as it found that the market was still evolving. Besides, efficiency considerations also appeared to favor ANI Technologies, which was providing ease of booking and ride tracking, besides having exponential growth in the market due to the presence of taxi aggregators. The Commission closed the matter for want of dominance and consequently did not examine the issue of predation.

Data protection and privacy concerns are also often raised in the context of digital platforms. Terms of use and privacy policies tend to be complex and written in an obscure manner hard for consumers to understand. Though data privacy is not the primary concern of competition authorities, data considerations may nevertheless be relevant for dominant players. The issue of privacy came before the Commission in *Vinod Kumar Gupta v. WhatsApp*,[28] where it was alleged that WhatsApp was abusing a dominant position by introducing a new privacy policy compelling users to share their account details and other information with Facebook. However, WhatsApp offered users the option to opt out of sharing such information with Facebook within 30 days of agreeing to the updated policy. This option was seen by the Commission to be sufficient to absolve WhatsApp of allegations that it compelled consumers to accept the updated policy.

Digital platforms, due to their multi-sided nature, may be in a position to impose potentially disadvantageous terms and conditions on different sides of the platform. On the consumer side, a platform may govern transactions using terms and conditions for the services or goods being traded, and exercise direct control over their performance (e.g., setting out rules for cancellations, refunds, automated price settings, dealing with complaints, or managing payments).

Discrimination between trading partners in relation to prices or other conditions of trade may also be operated by dominant digital platforms. In *Google I*, the Commission held that Google created an uneven playing field for competitors by "favoring" Google's own services and partners through manipulation of its search results to the advantage of its vertical partners, while Google's own sites appeared prominently on the search results page whether or not they were the most relevant or popular. In addition, an aggregator may give preferential or favorable treatment to its own partners, or its own firms set up to compete with the affiliates listed on its platform.

Anticompetitive practices may also include imposition of unfair prices or other unfair conditions of trade; limitation of production, supply

27 Case No 06 & 74 of 2015, Competition Commission of India.

28 Case No 99 of 2016, Competition Commission of India.

or technical development; or the conclusion of contracts on the condition that the other contracting party agrees to accept or deliver additional goods or services. Imposition of unfair and discriminatory conditions on online search advertising customers was also alleged in *Google I*. The Commission held that Google's ranking of its Universal Results prior to 2010, which was found not to be strictly determined by relevance, was a violation of Section 4(2)(a)(i). Also, the Commission found that the prominent display and placement of a so-called Commercial Flight Unit on the SERP, with a link to Google's specialized search options and services (Google Flights), amounted to the unfair imposition of search services on users, depriving them of additional choices.

Similarly, in *Umar Javed v. Google*[29] ("*Google II*"), a case that is pending investigation, the Commission took the *prima facie* view that mandatory pre-installation of the entire Google Mobile Services ("GMS") suite under its Mobile Application Distribution Agreement ("MADA") for mobile device manufacturers amounts to the imposition of unfair conditions, in contravention of Section 4(2)(a)(i) of the Act. *Prima facie*, the conduct was also found to have limited technical or scientific development relating to goods or services to the prejudice of consumers in contravention of Section 4(2)(b) of the Act. The Commission is yet to decide the ultimate outcome in *Google II*.

As discussed above, the concentration of big data in the hands of a few dominant firms or monopolists and their consequent refusal to share information with potential competitors or new entrants may not only limit effective competition to the detriment of consumers, but also lead to foreclosure, denying market access to competitors. In *Google I*, it was alleged by Matrimony that Google denied such access to competing search engines. The Commission observed that by restricting websites from partnering with competing search services, Google was denying its competitors access to the search business, marginalizing competitors and endangering their viability, while strengthening its own position. Consequently, the Commission held that Google's competitors were denied access to the online search syndication services market in contravention of Section 4(2)(c) of the Act. In *Google II*, the Commission has also found that, *prima facie*, Google allegedly denies market access to competing search apps in contravention of Section 4(2)(c) of the Act.

In both online and offline markets, "leveraging" involves a dominant enterprise or platform using its dominant position in one relevant market to enter into or protect it position in the other relevant market. As digital platforms are dual/multisided, dominance on one side can be used to produce anticompetitive conduct on another. This is because platforms not only serve as critical infrastructure, but are also integrated across markets. In *Google I*, the Commission was of the opinion that *Google* was in a position to impose unfair conditions under negotiated search intermediation agreements with publishers owing to its dominance in the market for online general web search, which it was using to strengthen its position in the market for syndicated search services, in violation of Section 4(2)(e). In its *prima facie* opinion on *Google II*, the Commission also found Google leveraged its Play Store to protect its position in general online search markets.

## IV. COMBINATIONS

Digital markets pose complex problems for competition authorities and analysts not only in antitrust analysis but also in combinations. Potential competition concerns that might arise from platform market power can be analyzed through merger control.[30] Innovation can be a major casualty in mergers in technology markets. Therefore, merger reviews in these markets have to focus on likely effects on innovation. Pre-emptive acquisitions of smaller companies by dominant digital or e-commerce firms may be used to thwart potential competition that could pose harm to an incumbent company's business model.

Merger review becomes all the more necessary in cases where the merging firms are close competitors. Dominant firms and near-monopolists in the tech field have exhibited a tendency to acquire disruptive or potentially disruptive firms in adjacent markets to forestall potential competition. Besides, transactions in digital markets are often driven by a motive to gain control over or to access the target's data. Such targets, normally start-ups, are asset-light and low in turnover. Transaction value may not have any direct correlation with the asset or turnover base of such firms. Problematic combinations could be better captured by transaction value rather than by asset- or turnover-based thresholds.

India has been taking a cautious approach in dealing with digital markets so that upcoming digital companies are not disadvantaged by any rash action by the regulator. At the same time, the Commission remains vigilant of overlaps, be they horizontal or vertical, as a general factor to be considered for the assessment of AAEC. Combinations involving digital players may not be amenable to the traditional merger review process. The Commission approved the acquisition by U.S. retail giant Walmart of a 77 percent stake in Flipkart for U.S.$16 billion, which was facilitated by the limited overlap between the companies' activities. The Commission observed that discounting practices by Flipkart may have to be reviewed by the relevant authorities. The Commission, in its order, observed that issues concerning FDI policy need to be addressed in that policy domain to ensure that online platforms remain a true marketplace providing access to all retailers.

29 Case No 39 of 2018, Competition Commission of India.

30 Competition issues in the digital economy, Note by the UNCTAD secretariat, May 1, 2019.

As mentioned above, digital firms are generally asset-light and income flows are largely indirect, unlike in offline markets. The current asset- and turnover- based thresholds for the notifiability of combinations may be allowing some deals in the digital sector to escape scrutiny by the Commission. "Size of transaction" or "deal value" thresholds are being demanded by many. Germany, for example, introduced merger notification thresholds based on transaction value in 2016. The Indian Competition Law Review Committee ("CLRC") recently submitted a report to the Minister of Finance and Corporate Affairs, recommending a transaction-based notification threshold for combinations in digital markets.

## V. CONCLUSION

While digital markets and e-commerce strengthen competition and reduce information asymmetries, they also pose substantial challenges for antitrust authorities. Digital markets are growing quickly and raise newer challenges such as hub-and-spoke agreements and algorithmic collusion, which pose conceptual and analytical issues for competition authorities. Such new forms of collusion are not only difficult to track but also it is an uphill task to bring them to book.

RPM in the digital space is much more complex than it is offline. Emerging challenges such as MFN clauses and IMAP may also come up before the Commission sooner or later.

Network effects exhibited by platform entities make market delineation particularly complex. Big data has been shown to be as potent as traditional physical infrastructure, leading to additional data protection and privacy concerns. Dominant firms' control over data may bestow market power to a considerable extent, making maverick firms vulnerable to abusive conduct. Incumbent online platforms may indulge in behavior aimed not only at denying access to competitors, but also at capturing and exploiting other relevant markets.

The question whether the existing legal instruments and provisions are capable of addressing concerns raised by digital markets is a real one. In India, the Commission found that the existing provisions are sufficient when it comes to antitrust. The definition of "price" in the Act is wide enough. In *Jasper v. Kaff*, the Commission hinted that Section 3(4), which lists RPM as a potentially prohibited vertical restraint, is adequate to deal with all substantial issues pertaining to online RPM.

Innovation is at risk of being obstructed, especially in mergers in digital markets. The current asset- and turnover-based thresholds may not be capable of capturing problematic combinations, since digital firms in general are light in assets and low in turnover. As noted, transaction value-based thresholds have been recommended by the CLRC in a report submitted recently to the government.

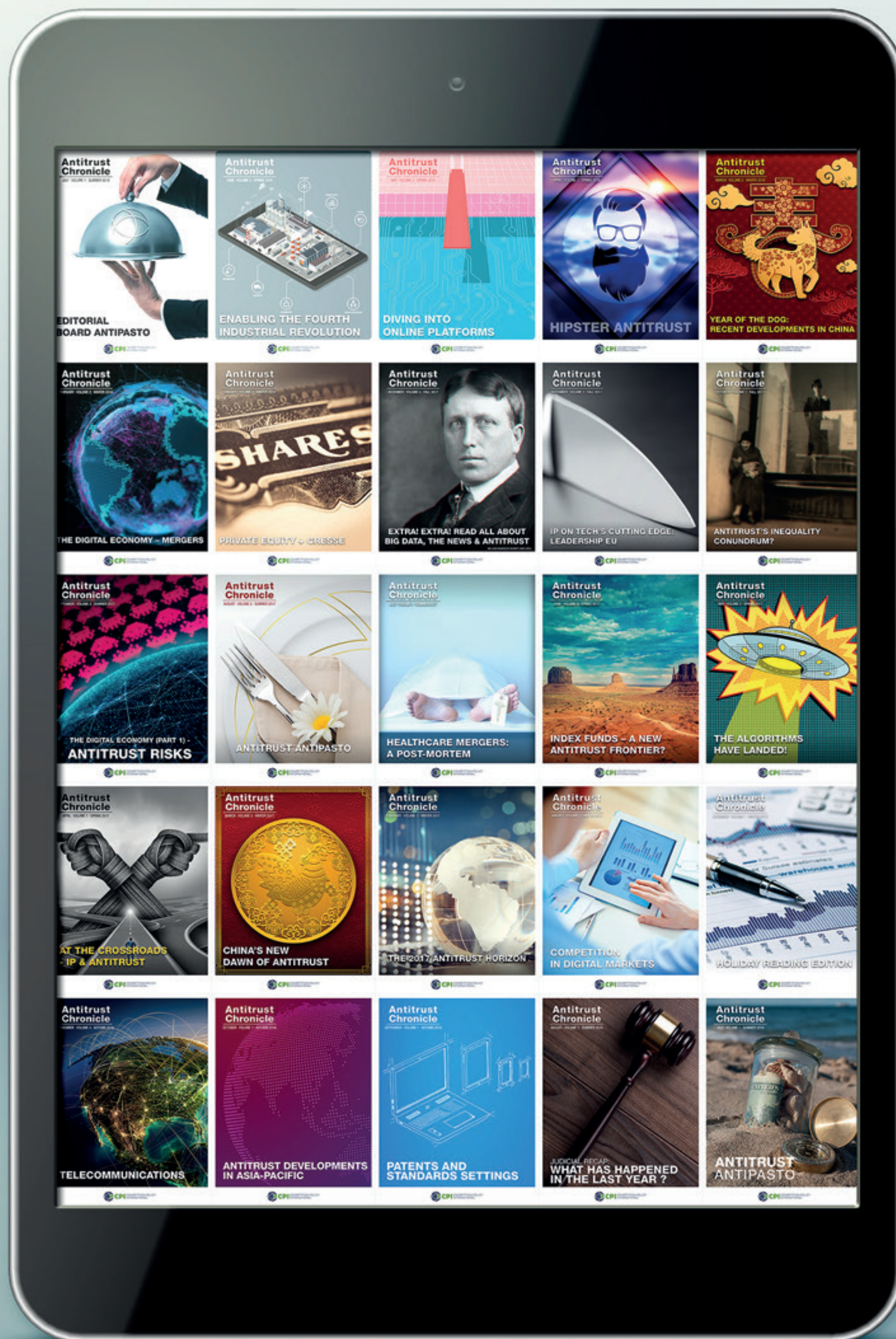
The approach of the Commission in dealing with digital markets has been rather cautious, lest innovation be blunted through the activism of the regulator, showing that the Commission appears to believe that regulatory intervention in tech industries should be targeted and proportionate.

CPI COMPETITION POLICY INTERNATIONAL

## CPI Subscriptions

CPI reaches more than 20,000 readers in over 150 countries every day. Our online library houses over 23,000 papers, articles and interviews.

Visit competitionpolicyinternational.com today to see our available plans and join CPI's global community of antitrust experts.



CPI COMPETITION POLICY INTERNATIONAL