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LETTER FROM THE EDITOR

Dear Readers,

Where there is a violation of the antitrust rules, there must be consequences. This can take the form of fines or damages for injured parties, but also structural or behavioral remedies designed to maintain or restore competitive conditions.

Antitrust remedies have become a hot topic in recent months. Prominent politicians around the world are calling for certain technology companies to be "broken up" for alleged antitrust infringements. In parallel, there have been significant policy shifts in the U.S. as regards the correct approach to remedies in merger enforcement.

The contributions to this Chronicle discuss the relative merits of structural and behavioral remedies for both merger and antitrust enforcement in light of the latest controversies, legal developments and empirical evidence.

On the antitrust side, European enforcers at the national level have gained new powers to impose effective remedies under the 2019 ECN+ Directive. But, as the contributions to this Chronicle discuss, to be effective, a remedy must be carefully tailored to the case. Depending on the facts, it can take the form of a simple prohibition ("bringing the infringement to an end") or a positive obligation (a "duty to deal"). Even "structural" remedies (i.e. divestments) are possible in appropriate abuse (and potentially cartel) cases.

On the merger side, U.S. enforcers have recently grappled with the enforcement of past merger remedies (e.g. the *Ticketmaster/Live Nation* consent decree), while the DOJ has reaffirmed its preference for structural over "conduct" or "behavioral" remedies, given the additional cost and difficulty associated with their monitoring and enforcement. As the contributions to this Chronicle discuss, finding the right balance is not a straightforward exercise.

In sum, effective detection, investigation, and deterrence of competitive harm are vital to antitrust enforcement. But to reap the full benefits of the competition rules, enforcers and courts must be able to remedy harm (or potential harm) to consumers. In this sense, antitrust enforcement without appropriate remedial action is akin to a medical diagnosis without the administration of a cure. At the same time, to use an oft-repeated phrase, the remedy ought not be worse than the disease. The pieces in this Chronicle seek to aid practitioners and enforcers engaged in this delicate balancing act.

For further expert analysis of the effectiveness of remedies in merger control look out for CPI's forthcoming publication, *Controlling Mergers* and *Market Power: A Program for Reviving Antitrust in America*, by Professor John Kwoka of Northeastern University, which will be available from CPI in both print and e-book formats this spring.

Lastly, please take the opportunity to visit the CPI website and listen to our selection of Chronicle articles in audio form from such esteemed authors as Maureen Ohlhausen, Herbert Hovenkamp, Richard Gilbert, Nicholas Banasevic, Randal Picker, Giorgio Monti, Alison Jones, and William Kovacic among others. This is a convenient way for our readers to keep up with our recent and past articles on the go, in the gym, or at the beach.

As always, thank you to our great panel of authors.

Sincerely,

CPI Team

SUMMARIES



CPI Talks......with Isabelle de Silva

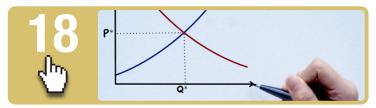
In this month's edition of CPI Talks... we have the pleasure of speaking with Isabelle de Silva, President of the French Competition Authority (the Autorité de la concurrence).



Conduct Remedies, With 2020 Hindsight: Have We Learned Anything in the Last Decade?

By John E. Kwoka

Ten years ago the U.S. antitrust agencies began using conduct remedies more frequently and more expansively than ever before. Research and experience, however, highlighted the limitations of such remedies, and so more recently the agencies have restated their determination to avoid the use of conduct remedies wherever possible and to strengthen remedies policy generally. Despite those statements, the agencies have in fact continued to rely on conduct remedies and indeed further expanded their use in ever more problematic ways. Three examples discussed in this article are the recent amendment to the original *Ticketmaster-Live Nation* settlement, the merger of Staples and Essendant, and the *Sprint/T-Mobile* merger. The conclusion of this review is that little appears to have been learned about the weaknesses of conduct remedies over the past decade.



Economic Democracy and Market Power

By Zoë Hitzig, Michelle Meagher, André Veiga, E. Glen Weyl

The original motivations of antitrust suggest an alternative remedy for market power: changes to corporate governance to include stakeholders who are subject to this power. In contrast to structural and behavioral remedies, "stakeholder remedies," as we call them, have several desirable features. Stakeholder remedies allow corporations to harness benefits of scale while blocking their ability to exploit market power and avoiding cumbersome direct regulation by nation states. Thus, such remedies have the potential to resolve the key tensions in existing competition policy, and could stimulate a new inclusive democratic paradigm for corporate governance.



Behavioral Remedies in U.S. Merger Settlements: Past, Present and Future

By Julie A. North & Jesse M. Weiss

While in the past, the FTC and DOJ have been receptive to considering behavioral remedies to resolve discrete competition concerns arising from the vertical components of a merger, policy pronouncements by senior officials at the FTC and DOJ under the current administration have led many to conclude that behavioral remedies are off the table when it comes to negotiating merger remedies with the agencies. An examination of recent merger settlements indicates that the DOJ has, in fact, substantially limited the use of the behavioral remedies, whereas the FTC remains receptive to considering behavioral relief to resolve discrete vertical competition concerns while preserving the benefits of vertical integration. Although it is unclear if the agencies' divergent track records indicate an actual conflict in their approaches to vertical remedies, practitioners should be aware that the fate of a vertical merger that presents discrete competitive issues, and the relief available to resolve such issues, may depend on which agency reviews it.

SUMMARIES



Defining Remedy Success

By F. David Osinski

This article discusses how to measure remedy success. Recent policy from U.S. antitrust agencies indicates potentially differing standards. The FTC's 2017 remedy study applies a "restoring competition" standard, focusing on non-merging firms' ability to compete. More recent commissioner statements suggest a "consumer welfare" standard, which includes benefits to the merging parties. DOJ remedy guidance potentially allows either standard. Economics research shows similarly varying approaches for including procompetitive benefits to the merged firm. This article describes the tension between the two standards and provides two recent examples (one horizontal, one vertical) of mergers that could satisfy one but fail the other. Given recent calls for more remedy retrospectives, we first must establish the foundation: How do we measure remedy success?



Non-Self-Enforcing Remedies and the Recent Modification to the *Ticketmaster/Live Nation* Merger Consent Decree

By Mary T. Coleman & David A. Weiskopf

Merger remedies may be offered by the merging parties or demanded by antitrust enforcers in cases in which a merger promises benefits to consumers but also risks harm to competition in one or more markets. This article considers the economic issues that arise in developing merger remedies — and in particular discusses the use of self-enforcing versus non-self-enforcing remedies. The article then addresses how these issues relate to the recent concerns raised by the Department of Justice regarding whether Live Nation was following the requirements of the remedy associated with its merger with Ticketmaster in 2010.



Remedies: Structural, Behavioral, Both, or None? Enforcement Trade-Offs for Mergers and Antitrust

By Andreea Cosnita-Langlais

This note reviews the rationale behind both structural and behavioral remedies, not only in merger but also in antitrust cases. The cost-benefit analysis for the enforcement of remedies depends on the case examined, and general presumptions on the relevance of one or another type of remedies and even on their very opportunity might easily be misguided. This calls for a consistent theory of competitive relief, in order to properly frame the enforcement of remedies.



Structural vs. Behavioral Remedies

By Frank Maier-Rigaud & Benjamin Loertscher

The European Commission's remedial practice displays important differences in the type of remedies accepted in merger as opposed to antitrust cases. This paper briefly reviews the Commission's remedies practice over the last 14 years highlighting the differences and discussing inconsistencies. It raises the question why predominantly behavioral remedies are chosen in antitrust cases and how this practice could be reconciled with the approach in merger control where the risks to effective competition are viewed as deriving from changes in the structure of the market and where therefore structural remedies are typically considered necessary.

SUMMARIES



An Economist's Thoughts on Behavioral Remedies in Merger Enforcement

By Russell Pittman

There is a substantial literature examining the experience in both the United States and the European Union with the imposition by enforcement agencies of remedies as a condition for a merger to proceed without challenge. The broad goals of the agencies have arguably remained consistent over the years, and a number of more specific "lessons" of the past seem to have become broadly accepted, including both a general preference for structural over behavioral remedies but also a willingness to impose behavioral remedies in certain, limited situations, either in support of structural remedies or on their own. This paper examines some arguably underappreciated complications arising from the imposition of behavioral remedies, including the difficulty of enforcing non-discrimination provisions, the danger of perverse incentives provided by such provisions, and the counter-argument common in the debates regarding infrastructure access pricing - that in some circumstances discrimination itself may be pro-rather than anti-competitive.



Structural vs. Behavioral Remedies in Big Tech Sectors

By Francesco Ducci & Michael Trebilcock

In this short article, we evaluate the role of structural and behavioral remedies in big tech sectors. First, we highlight the prominence of structural solutions in recent policy debates, discussing both their limitations and their potential role in light of the economic and technological features of digital markets. Then, we emphasize the importance of more behavioral solutions and the role that they may play out in future policy developments. In particular, we highlight the importance of instruments such as portability measures that can reduce entry barriers created by network externalities, as well as the role of other behavioral remedies that can exploit the reduced scarcity constraints of digital bottlenecks such as ranked-display of results on a platform.

WHAT'S NEXT?

For May 2020, we will feature Chronicles focused on issues related to (1) **Healthcare**; and (2) **Killer Acquisitions**.

ANNOUNCEMENTS

CPI wants to hear from our subscribers. In 2020, 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 JUNE 2020

For June 2020, we will feature Chronicles focused on issues related to (1) **Monopsony**; and (2) **Self-preferencing**.

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.



CPI TALKS...



...with Isabelle de Silva

In this month's edition of CPI Talks... we have the pleasure of speaking with Isabelle de Silva, President of the French Competition Authority (the *Autorité de la concurrence*, or "AdC").

Thank you, Ms. de Silva, for sharing your time for this interview with CPI.

1. In January of this year, the AdC published a report (the "AdC Report") reflecting on the AdC's use of behavioral remedies in competition enforcement. What, in your view, are the key conclusions to be drawn from this report?

The AdC Report sets out how the AdC has used behavioral remedies in merger and antitrust cases so far. Its purpose is twofold: to provide technical guidance for companies, competition law practitioners and academics, and to drive thinking forward on the use of behavioral remedies by the AdC in the future.

The report acknowledges that behavioral remedies have several important advantages. They can take many forms and adapt to many situations. The decision-making practice in antitrust cases has also shown that, when proposed remedies are discussed with third parties, they can, sometimes, bring to light difficulties with existing regulations, so the process is helpful in that it makes it possible to also address these problems.

However, behavioral remedies also raise some specific challenges. First, they may be insufficient for certain types of anti-competitive effects, such as creating a reduction in horizontal competition. In that case, behavioral remedies might need to remain in place for a very long time, without guarantee that, in the end, the market will function well by itself. Another aspect is that monitoring the implementation of behavioral remedies often creates a heavy burden for enforcers and companies alike.

As the challenges of behavioral remedies may often outweigh their benefits, a key conclusion of the report is that the AdC will likely make more limited use of such remedies and favor, instead, quasi-structural remedies in antitrust cases, as well as structural remedies in merger cases.

2. The classic objection to behavioral (as opposed to structural) remedies lies in difficulties relating to their monitoring and enforcement. This concern is perhaps most clearly reflected in practice under the EU Merger Regulation, where the EU Commission displays a clear preference for structural remedies, on this basis. While it is difficult to draw bright-line rules in this regard, would it be worthwhile to issue more detailed guidance documents to identify those situations where behavioral remedies may be more appropriate and proportionate (despite their drawbacks in terms of monitoring and enforcement)?

The AdC Report is designed as a form of guidance for companies, as well as legal and economic advisors. They will be able to find in the report a global synthesis of the different cases in which the AdC accepted behavioral remedies. We don't want to be too prescriptive because remedies must always be tailor-made for a specific problem, market and competitive situation. But companies will find a wealth of information in our report, for example regarding cases in which behavioral remedies can be a viable avenue and those in which they will be difficult to consider.

The approach taken by the report is to present general principles governing the choice of remedies, as well as the objectives related to each category of remedies (behavioral and structural), to conduct a case-by-case analysis of the AdC's decision-making practice and to share the lessons learned from this experience. The report will hopefully provide valuable information on the subject since it is fairly comprehensive.

3. As far as judicial review of remedies is concerned, the AdC Report notes that the role of the competent French courts is limited, for the most part, to assessing the proportionality and legality of any remedy imposed, and that courts do not enjoy broad discretion to reformulate detailed aspects of a given remedy imposed by the regulator. Similar rules apply in most jurisdictions. In your view, is this the correct approach? Alternatively, should courts enjoy broader flexibility to reformulate or otherwise correct remedy design, or is this role best left to specialized regulators such as the AdC?

The applicable judicial review is well balanced and works well. Depending on the decision at stake, two different judges intervene: the Paris Court of Appeals for antitrust decisions and the administrative Supreme Court (Conseil d'État) for merger decisions. They both review the legality of remedy decisions: while the Conseil d'État assesses a potential abuse of power and can annul the contested decision in whole or in part, the Paris Court of Appeals can annul or amend the contested decision (noting that the Court does not have the power to discuss new remedies with companies to make them binding, nor can it order them to comply with other specific conditions not provided for in the contested decision). Regarding the assessment of the proportionality of remedies, the Paris Court of Appeals' review is limited to a so-called "manifest error control," while the Conseil d'État exercises a so-called "normal control," which is quite thorough. In at least one case, for example, the Conseil d'État decided that a remedy was not sufficient to compensate for the lessening of competition, and then went on to annul the AdC's decision in that respect. The AdC had to come up with a new, more stringent remedy.

I find it very wise that the judges refuse to define themselves what a particular remedy should be. First, each remedy is based on a detailed analysis of the different parameters of competition, and it is, first and foremost, the AdC's job to conduct such an analysis. Second, a remedy should be proposed by the parties and must, in many cases, be fine-tuned after discussions with the AdC and feedback received from third parties. A court is not well-equipped to monitor such a process, and should then be only asked to review its final outcome.

4. The AdC Report notably concludes that, like other competition authorities, the AdC will consider having more limited recourse to behavioral remedies in future, and will favor so-called "quasi-structural" commitments for anticompetitive practices, and "true" structural commitments in merger law, whenever they provide a better resolution to the competition issues identified. What criteria should be used to determine which type of remedy is most appropriate? Does the AdC propose to issue guidance in this regard? Should other bodies also update their guidance (notably, should the EU Commission consider revising its Remedies Notice in line with your conclusions)?

The AdC Report provides ample information to allow stakeholders to make informed decisions. The report underlines that the nature of remedies depends on the specific competition concerns at stake. For merger cases, behavioral remedies have been accepted in 36 percent of clearance decisions in which anti-competitive effects were identified (55 percent if mixed remedies — behavioral and structural - are included) since 2009. The proportion of behavioral remedies out of the total remedies accepted by the AdC is among the highest in Europe. In antitrust matters, because concerns are not related to market structure but to market behavior, remedies were mostly behavioral so far or quasi-structural in some instances. The report details the circumstances of each case in order to explain in which situations a particular remedy may be warranted. The report also notes the difficulties raised by behavioral remedies and the clarification, in the ECN+ Directive, that structural injunctions can indeed be issued in antitrust cases.

We currently feel no need to take the guidance exercise a step further by imposing allocation criteria. First, as illustrated by the report, remedies must be decided on a case-by-case basis. Second, as the report also recalls, the effectiveness of remedies lies in the fact that they are proposed by companies and developed jointly with relevant market players, which reinforces companies' accountability vis-à-vis the remedies they have proposed and will need to implement.

5. Remedies must be tailored to the facts of the individual case and the industry at hand, the nature of the specific infringement identified, and the theory of harm relied upon by the regulator. New business models in the so-called "digital economy" raise novel issues for enforcers, whether engaged in antitrust enforcement, or merger control. Notably, questions such as access remedies to "big data," or other complex conduct raised by the practices of big tech companies raise issues that are not necessarily analogous to issues raised in classic antitrust cases. Might complex behavioral remedies necessarily be a feature of enforcement with regard to such practices? What is to be learned from recent high-profile remedy negotiations at both the national and international levels in this industry?

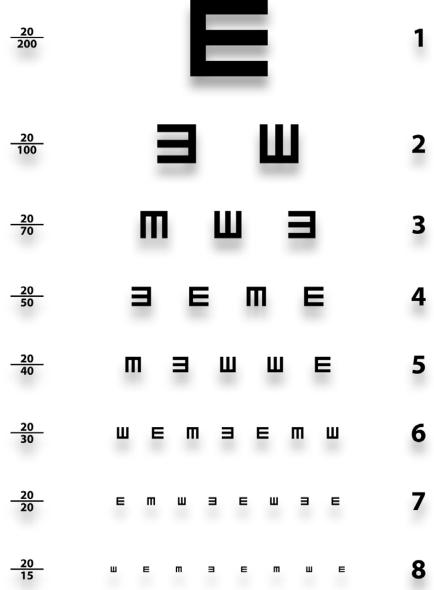
It is true that digital technologies involve increasingly complex remedies and therefore require additional resources and expertise for competition agencies. It is one of the reasons why the AdC created a Digital Economy Unit. One specific task of this specialized unit is to assist our Investigation services in assessing remedies in digital markets and monitoring their implementation.

An emblematic case featuring behavioral remedies in the digital economy sector is the Google Shopping case in which the European Commission fined Google €2.42 billion for abusing its market dominance as a search engine by giving an illegal advantage to another Google product, its comparison shopping service. The Commission decision required Google to stop its illegal conduct and to apply the same processes and methods to rival comparison shopping services in Google's search results pages as it gave to its own comparison shopping service. Google has sole responsibility to ensure compliance and is under an obligation to keep the Commission informed of its actions. This case is an example of behavioral remedy applicable to an antitrust infringement decision.

More generally, the current debate about platforms illustrates, according to some, the need to apply, very early on, behavioral remedies to maintain a level-playing field, before anticompetitive behavior has wiped out competition.

This is something we take into account in our enforcement. In that respect, interim measures can also incorporate, quite early on, some injunctions to address specific behavior in order to prevent the consequences of a possible abuse of dominance for instance. The recent decision taken by the AdC on the matter of press content ancillary rights is a good example, and illustrates that it is possible to act quickly by issuing interim measures. Following a complaint, the AdC found that Google may have abused its dominant position on the market for general search services by imposing unfair transaction conditions on publishers and news agencies. Google was ordered to negotiate with publishers and news agencies that request it for the remuneration due to them for any use of protected content based on transparent, objective and non-discriminatory criteria. The injunction required that the negotiations actually result in a remuneration proposal from Google. The company will have to provide the AdC with monthly reports on its compliance with the decision.

CONDUCT REMEDIES, WITH 2020 HINDSIGHT: HAVE WE LEARNED ANYTHING IN THE LAST DECADE?



BY JOHN KWOKA1



¹ Northeastern University.

I. INTRODUCTION

A decade ago, U.S. antitrust policy embarked on an experiment in expansive use of conduct remedies for mergers. Several major cases were settled with agreements that the merged firms—as a condition for approval of their mergers—would not engage in specific anticompetitive actions. In 2011 the Antitrust Division of the Justice Department issued a revised Remedies Guide that indicated greater receptivity to conduct remedies than in an earlier version of the Guide.

But a growing body of experience and research was finding that conduct remedies were hard to write, even more difficult to enforce, and often simply ineffective. More recently, these cautionary lessons seem to have had an impact. Three years ago, the new Assistant Attorney General for Antitrust described conduct remedies as "fundamentally regulatory, imposing on-going government oversight" on markets and promised "to return to the preferred focus on structural relief." He pointedly withdrew the revised Remedies Guide in favor of the earlier version that emphasized the very limited role of conduct remedies. Similarly, the incoming chair of the Federal Trade Commission stated his determination to improve on all past remedies policy, not just conduct remedies. He cited as unacceptable a 30 percent failure rate on certain divestiture remedies and asserted that the rate "need[ed] to be "lowered substantially or, ideally, zeroed out altogether."

Since that time, however, the agencies have not only failed to limit reliance on conduct remedies: they have continued to use them and even extended their use in more problematic directions. This essay begins with a reminder of the flaws inherent in conduct remedies and then describes three recent cases that raise a question of whether anything has been learned from recent experience with such remedies.

II. CONDUCT REMEDIES: THE BAD AND THE TRULY UGLY

Conduct remedies represent an effort to allow a merger to proceed while preventing the competitive harms that it represents through a series of prohibitions or prescriptions. The prohibitions might be on foreclosure or leveraging, the exchange of competitively sensitive information, or retaliation against independent rivals, while the prescriptions might entail mandatory access or must-supply conditions. But conduct remedies suffer from several inherent defects. Most fundamentally, they require a firm to act against its own interests, that is, in ways that diminish its profit. As a result, they inevitably create incentives for the firm to evade or avoid them. Evasion is facilitated by the fact that conduct remedies are difficult to write without ambiguities or omissions that firms can use to circumvent their intent. And under any circumstances, they are costly to enforce, since offending actions can be hard to observe, and the agencies are not structured as on-going regulators.

Individual case experience includes numerous examples of flawed conduct remedies and the failure to preserve competition. Broader economic evidence of the actual outcomes of conduct remedies corroborated these concerns.⁴ All of this led the Antitrust Division and the FTC most recently to declare their strong preference for structural remedies—divestitures—in all but the most unusual of circumstances. As the following examples show, however, those statements and the actual practice of the agencies have diverged.

III. TICKETMASTER-LIVE NATION: THIS TIME WE REALLY MEAN IT

At the time of their 2010 merger, Ticketmaster was the dominant ticketing services company and Live Nation a very large concert promoter. The merger raised horizontal concerns since Live Nation had begun to deploy a ticketing services operation in competition with Ticketmaster. The merger also raised vertical concerns, most especially that the merged company might condition the provision of either Ticketmaster's ticketing services (or Live Nation's concerts) on a venue also taking the other business of the merged company. The Justice Department approved the merger subject to an order that sought to prohibit these practices.⁵

The remedy contained two major relevant provisions. One prohibited retaliation, which was defined as "refusing to provide live entertainment events to a venue owner on less favorable terms, for the purpose of punishing or disciplining a venue owner because the venue owner has contracted or is contemplating contracting with a company other than defendants for primary ticketing services."

- 2 Makan Delrahim, "Modernizing the Merger Review Process," Sept. 25, 2018.
- 3 Joseph Simons, Completed Initial Questionnaire, February 2018.
- $4\ For\ an\ elaboration\ of\ the\ arguments\ and\ evidence,\ see\ John\ Kwoka,\ "Merger\ Remedies\ An\ Incentives/Constraints\ Framework,"\ Antitrust\ Bulletin,\ 2017.$
- 5 For discussion of the horizontal aspects and a fuller description of the vertical issues, see John Kwoka, "Rockonomics: The Ticketmaster-Live Nation Merger," in The Antitrust Revolution, 7th ed, J. Kwoka & L. White, eds., 2019.

The order then assured the merging company that "'retaliate' does not mean pursuing a more advantageous deal with a competing venue owner" and that the merged companies were not prohibited from "bundling their services and product in any combination or from exercising their business judgment in whether and how to pursue, develop, expand, or compete for any business, but subject to the terms of the order. Clearly, the effectiveness of this anti-retaliation provision was dependent on whether terms such as "less favorable," "for the purpose of," "bundling," "business judgment," and "whether … and how to … compete" could operationally distinguish normal from anticompetitive behavior. Moreover, contracts between Ticketmaster and venues involved numerous terms and provisions, typically over several years, making identification of retaliation nearly impossible.

But it was the other provision, as interpreted by Live Nation, that gutted the remedy. The key language stated that the merged firm must not "condition or threaten to condition the provision of Live Nation Entertainment Events to a venue owner" depending on whether the latter had contracted with another company for ticketing services. But as the Justice Department acknowledged in 2020, beginning "shortly after the decree was entered in 2010," the merged companies "repeatedly conditioned and threatened to condition Live Nation's provision of live concerts on a venue's purchase of Ticketmaster's ticketing services, and they have retaliated against venues that opted to use competing ticketing services, all in violation of the plain language of the decree ." The Justice Department recounted six specific episodes, dating back to 2012, in which Ticketmaster threatened to withhold, and in many cases in fact did withhold, Live Nation concerts unless a venue also used Ticketmaster's services.

How did Ticketmaster-Live Nation justify these actions? The company's position was that language prohibiting it from withholding "Live Nation Entertainment Events" meant *all* events, so that it was altogether free to condition or withhold *some* events from venue owners. Whatever the plausibility of this interpretation, the Justice Department acknowledged that it had resulted in a decade of harm to consumers and competition of the very sort that was originally feared. Its response was to submit an amended order "clarifying" the original language so as "to avoid any doubt" about its intent, effectively restating in 2020 what it obviously intended in 2011. It did not charge Ticketmaster with violating the "plain language" of the earlier decree. It imposed no penalty or fine for a decade in which Ticketmaster conditioned, retaliated, and profited. It sought no disgorgement of profits earned based on this strategic misinterpretation.

In the starkest terms, this experience demonstrates the many inherent defects of a conduct remedy. As noted at the outset, these remedies are difficult to write, and companies have the time, resources, and incentives to find ways of avoiding their intent. They are difficult to enforce, even in the face of years of violations of the "plain language" of an order. And at the end of the day, it appears to be impossible to penalize them for any behavior for which there is a pretextual excuse. Ticketmaster has simply gotten away with it.

IV. STAPLES-ESSENDANT: GOING VERTICAL

Over many years, indeed decades, the antitrust agencies have accepted the specious argument that few if any vertical mergers raise competitive concerns but instead, they confer cost savings from the elimination of double marginalization and other efficiencies. As a result, there have been few challenges to vertical mergers, and in those few cases where competitive concerns have been identified, conduct remedies have been adopted as solutions. Such is the case with the FTC's decision with respect to Staples's acquisition of controlling interest in Essendant. Staples is one of two large two office superstores that sell office supplies to businesses and retail customers. Essendant is the larger of two national distributors of office supplies, selling both to Staples and to independent dealers in competition with Staples. In September 2018, Staples announced its intention to acquire Essendant. An obvious competitive concern with this vertical merger was that the merged firm would become the crucial supplier to its downstream rivals, so that it could raise price to those rivals, relax the competitive constraint that they posed, and thereby raise its own price and profit.

6 Justice Department Memorandum in Support of Motion to Modify Final Judgment and Enter Amended Final Judgment, January 8, 2020, p. 6.

7 *Ibid.* p. 1.

⁸ *lbid.* p. 11. This confirmed by language in the Amended Final Judgement that Live Nation "waives any argument that this [provision] ...only prohibits retaliation or conditioning with respect to all Live Nation content," p. 19.

⁹ The amended decree also provides for a monitor and enhanced fines for future violations, neither of which addresses past violations. Moreover, the new decree runs for only five years instead of the original ten, halving the period under which the merged company is subject to any constraint (as well as postponing it by a decade).

¹⁰ In reality there is often a risk of foreclosure, and the proposition about double marginalization depends on a number of strong assumptions and limitations. John Kwoka & Margaret Slade, "Second Thoughts on Double Marginalization," Antitrust, Spring 2020.

¹¹ Federal Trade Commission, "FTC Imposes Conditions on Staples' Acquisition of Essendant," Washington DC, January 2019.

The FTC majority nonetheless approved the acquisition in January 2019. It dismissed concern over foreclosure by alluding to nonpublic evidence that, in the face of a price increase by the merged company, "many" independent dealers could simply switch to the one other large distributor and that any customers lost by the independents would "not likely" switch to Staples anyway. The minority FTC commissioners disputed both the evidence and the conclusions of the majority with respect to concerns over foreclosure.

The FTC majority did, however, acknowledge one mechanism through which the merged company might gain an anticompetitive advantage. Since Essendant compiled data from resellers about end customers, the post-merger Staples would have access to this competitively sensitive information. Together with reseller cost data, this would permit Staples to determine how much it could raise its prices without losing customers to rivals. To address this one concern, the majority adopted a conduct remedy in the form of a firewall intended to prevent the exchange of competitively sensitive information between parts of the merged company's operations. It is this one acknowledged competitive concern and the associated conduct remedy that will be the sole focus here.

The firewall in this case provided that employees who are supposed to perform Essendant's wholesaling functions with respect to its resellers are prohibited from disclosing competitively sensitive information to any other employees. But like most firewalls, this order contains exceptions to allow for what are deemed to be normal and necessary information transfer, as well as provisions concerning the movement of employees across the relevant divisions. In this case the order provides for three exceptions.

First, certain Staples employees "performing wholesale, legal and regulatory, or shared services functions or members of a prescribed management oversight group will have access to protected" information. This exception was intended to permit a management group — newly formed to oversee joint operations — but not other employees to access the data for normal business decisions. Secondly, the rule allowed access to information about Essendant resellers if presented in an "aggregated ... and anonymized form." It is not difficult to envision how these channels can result in the transfer of at least some useful competitively sensitive information.

Furthermore, like most firewalls, this contains a provision for the routine transfer within the merged company not of the competitively sensitive information itself but of employees that know or have access to such information. Unrestrained, of course, the transfer of knowledgeable employees can be a near-perfect substitute for direct information exchange, so conduct orders involving firewalls strive to prevent misuse of such transfers, again without impeding normal internal reassignments.

The difficulties associated with these conflicting objectives have in the past resulted in some strange conduct remedies. In approving the merger of Google and ITA in 2011, for example, the Justice Department decree expressly permitted the merged company to assign an employee to any job, even if that person had access to competitively sensitive information, unless there was "evidence of intentional reliance on information other than information that was retained in the unaided memory of such employee (provided that memory is "unaided" if the employee has not intentionally memorized the information for the purpose of retaining and subsequently using or disclosing it)."¹²

That is, transfers of knowledgeable people were permitted unless the person deliberately memorized the competitively sensitive information in order to port it across the firewall. It is difficult to believe anyone would view this provision as enforceable and effective — or as antitrust policy.¹³

The *Staples-Essendant* order does not include any language similar to that in *Google-ITA*, but it does explicitly permit otherwise firewalled persons to be transferred so long as that transfer is in accordance with "usual and customary business practices," subject to two further conditions. The first is a requirement for advance notice to an outside monitor of such an intended transfer, and secondly, a minimum waiting period of 6 months prior to the transfer during which the person would no longer have access to such information. While these provisions avoid the obviously vacuous nature of the *Google-ITA* remedy, they ultimately permit transfers of competitively sensitive information, the potential for which undoubtedly fosters discomfort of independent rivals and the erosion of competition.

Apart from these specifically discussed and disputed channels, information conveys in many ways, not all formal, and not all intentional. As a result, there is little direct evidence about the effectiveness of firewalls. Evidence from an arguably similar context, namely, firewalls in financial settings, is not encouraging. One summary of that literature reports that "informational firewalls are extremely porous and that traders and executives in diversified financial firms are able to access and misuse information obtained across internal firewalls."

¹² U.S. v. Google Inc and ITA Software Inc, Competitive Impact Statement, Apr. 8, 2011.

¹³ Even if strictly followed, this prohibition does not specify any minimum length of stay, so that the relevant person could apparently be transferred as frequently as desired. The entire passage was the cause of some mirth within one of the companies.

¹⁴ Christopher Gorman, "Are Chinese Walls the Best Solution to the Problems of Insider Trading and Conflicts of Interest in Broker-Dealers?" Fordham Journal of Corporate and Finance Law, 2004.

Given the often facile reliance on information firewalls, there would seem to be an urgent need to study their effectiveness, in particular, determining what type of firewall and associated conditions, and what firm and market circumstances are more vs. less likely to result in their successful application. The present practice of simply writing and relying on firewalls of unproven, and sometimes dubious, effectiveness needs to be stayed while the agencies conduct retrospective analyses of past firewalls. Retrospectives have been shown extremely valuable in better understanding the outcomes of mergers and of remedies in general. It is now time to apply that methodology to firewalls rather than assuming their effectiveness to justify approval of anticompetitive mergers.

V. SPRINT/T-MOBILE: MASQUERADING AS MERGER CONTROL

Classic remedy policy toward horizontal mergers involves divestiture of overlapping assets, perhaps accompanied by some temporary transition services to ensure the business prospects of the divested assets. Over time, this model has been extended to involve less than complete divestitures. But divestitures that do not include a full complement of closely associated functions, supply arrangements, etc., have often failed, ¹⁵ and an even worse fate might be expected for remedies involving ever fewer asset divestitures and requiring more third-party assistance subject to a conduct order.

The new frontier in this model of "competitor creation" would seem to be DOJ's remedy in the case of the *Sprint/T-Mobile* merger. In early 2018, Sprint and T-Mobile, two of the four national wireless carriers, announced their intent to merge. The companies promised benefits in the form of faster deployment of new technologies and, later, consumer price freezes, but most observers doubted that a four-to-three merger would in fact improve market performance--or that the Justice Department would approve such a major consolidation of the industry. Indeed, DOJ itself later stated:

The merger would eliminate Sprint as an independent competitor, reducing the number of national facilities-based mobile carriers from four to three. The merger would cause the merged T-Mobile and Sprint ("New T-Mobile" to compete less aggressively. Additionally, the merger would likely make it easier for the three remaining national facilities-based mobile wireless carriers to coordinate their pricing, promotions, and service offerings.

Having conceded the need for four competitors, it was somewhat unexpected in July 2019 that DOJ indicated it had settled with the parties on terms that would permit the merger to proceed. The settlement imposed an unusual set of conditions on Sprint and T-Mobile, designed to create a new wireless competitor to replace the one whose elimination it was approving. That new competitor would be Dish, a national satellite TV distributor with no wireless operation or experience. Dish is supposed to evolve into that new competitor based on some modest asset and operations divestitures, together with crucial conduct-based services and assistance from the merged Sprint/T-Mobile.

The settlement set out a long list of actions to be taken by the merging parties and by Dish. First, in the short term, the merged T-Mobile would transfer to Dish its prepaid wireless operation — a minor and not very valuable business. Since Dish has no wireless infrastructure, it would simply be reselling T-Mobile services, rebranded as its own but completely dependent on T-Mobile as its supplier. Research as well as common sense shows that resale does not constitute full scale competition and, indeed, when dependent on a direct rival, may not constitute competition at all.¹⁶

Second, within a year, Dish must begin providing national postpaid services and continue to expand that service over seven years, at every step supposedly assisted by the merged T-Mobile. T-Mobile is supposed to start transferring thousands of its cell sites and hundreds of its retail stores as it decommissions those that it no longer needs. Since these involve duplication, T-Mobile would presumably shed its inferior assets, cementing Dish's market disadvantage.

Third, for up to three years, T-Mobile would have to provide necessary "transition services" to Dish for any prepaid as well as postpaid services. These transition services include billing, customer care, SIM card procurement, device provisioning, and "all other services used by Prepaid Assets." This arrangement would make Dish's nascent service offerings fully dependent on T-Mobile's willingness to assist its new competitor in providing high quality service, assistance that is obviously contrary to T-Mobile's own interests.

¹⁵ The 1999 FTC Divestiture Study reported a 40 percent failure rate for divestitures of less than an entire business unit. Despite that, the FTC inexplicably continued to use such remedies, for which their follow-up study in 2017 found an even higher failure rate.

¹⁶ This has been the conclusion of the FCC. Federal Communications Commission, 20th Wireless Competition Report, Sept. 2017, n. 99.

And fourth, since Dish will only slowly be able to provide its own services, T-Mobile would have to provide Dish with sound and seamless — "robust" — access to its cell sites for up to seven years, in order for Dish to offer postpaid services. This provision makes Dish fully dependent on its direct competitor to launch and expand its services. Moreover, even if successful, the remedy does not envision Dish as a new facilities-based competitor capable of replacing the one eliminated by the merger until at least 2026.

This remedy fails the test of plausibility. More than perhaps any other remedy, it involves a linkage between the putative replacement wireless carrier and the merged company that puts the fate of the new competitor fully in the hands of its incumbent rival that has both the means and the incentive to prevent its emergence as a strong new firm. As written, Dish will be dependent on the merged T-Mobile providing good support for the divested prepaid business, support that does not compromise Dish's start up so that it is branded as a poor-quality rival that loses customers and perhaps employees. Then it will be dependent on T-Mobile transferring thousands of cell sites and hundreds of retail locations on a schedule and of a quality that allows Dish to start its own competitive facilities-based service. Dish will also be dependent on T-Mobile providing complex and crucial transition services to assist Dish. And as Dish ramps up over seven years or more, it must hope that T-Mobile provides "robust" access to its cell sites so that Dish can piggyback its own nascent services on that of its direct competition.

This scenario is not a remedy to an antitrust problem. It is an utterly speculative story, contrary to the actual incentives of key parties, about how Dish might eventually grow and become a fourth competitor. That will not happen for the simple reason that that scenario depends at each stage on behavior by T-Mobile that is plainly contrary to its own interest, behavior that would simply help its competitor and lower its own profit. Given the innumerable ways whereby T-Mobile can compromise, handicap, and even sabotage Dish's emergence as a full-blown competitor, there is little reason to expect this process to end in any other way. Indeed, few remedies embody clearer adverse incentives and more implausible expectations.

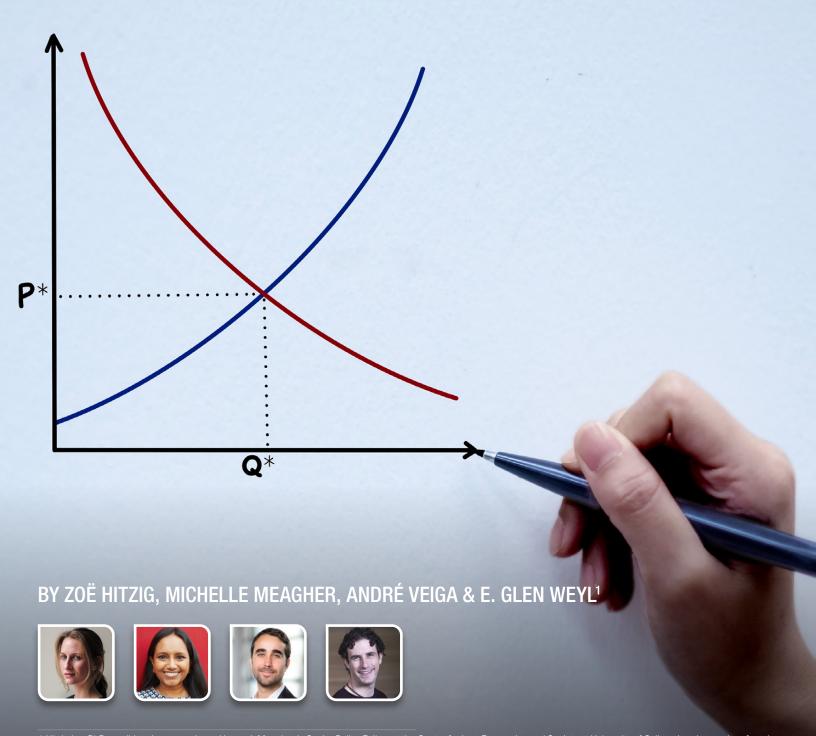
Even more worrisome is the fact that, if this plainly anticompetitive merger can be rescued with such an implausible remedy, it is unclear what merger cannot be so resolved.

VI. SUMMARY

At the outset, this essay posed the question: what has been learned about conduct remedies over the past decade? The *Ticketmaster-Live Nation* experience demonstrates again what was always known, namely, that it may be easy for a firm subject to a conduct remedy to evade or avoid its intent and achieve the feared anticompetitive effects. The remedy for the *Staples-Essendant* merger, apart from dismissing concern with foreclosure, rests entirely on unproven and to some degree doubtful restraint on information exchange. And the resolution of the *Sprint/T-Mobile* merger illustrates the lengths to which the antitrust agencies now seem to be prepared to use remedies that will not predictably or even plausibly resolve the competitive issues with a merger.

These experiences suggest that the hard lessons about conduct remedies have not in fact been learned.

ECONOMIC DEMOCRACY AND MARKET POWER



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I. INTRODUCTION

Dissatisfaction with the present state of corporate capitalism has reached something of a boiling point. Global business elites are finally responding to years of simmering discontent, exemplified by social movements like Occupy Wall Street and by progressive presidential candidates' proposals calling for more aggressive antitrust and regulatory policies. The fundamental purpose of the corporation — long defined by the share-holder value paradigm — is being revisited. Business leaders and policymakers seem to be summoning a reorientation of the corporation around *stakeholders*, rather than shareholders. The Business Roundtable, a group of nearly 200 chief executives of major U.S. corporations, broke with decades of corporate doctrine in April 2019 when the group distanced itself from the shareholder value standard, issuing a statement affirming a "fundamental commitment to all our stakeholders." The official theme of this year's World Economic Forum in Davos was "Stakeholders for an Inclusive and Sustainable World;" the conference focused on imagining a new stakeholder-based capitalism.

Despite resounding calls to reorient the goal of corporate America around "stakeholders," the path forward is unclear. Is it enough to reinvigorate our existing antitrust laws and task them with protecting stakeholders in steadily concentrating markets? How does corporate governance, which currently epitomizes the shareholder value paradigm, need to change in order to engineer the reorientation toward stakeholders? Some, aligned with the "antitrust revival" are calling for break-ups here, there, and everywhere. Others, unwilling to sacrifice the perceived efficiency and international competitive advantages of large monopolistic corporations, argue that companies with market power simply need to be more tightly regulated to ensure that their operations align with stakeholders' needs.

In what follows, we cut a path through this thicket. We draw on the original motivations of antitrust to suggest a potential change to corporate governance: democratically include corporate stakeholders as a remedy for market power.

In arguing in the Senate for the Sherman Antitrust Act that eventually bore his name, Senator John Sherman declared, "If we will not endure a king as a political power, we should not endure a king over the production, transportation, and sale of any of the necessaries of life." In response to monarchies of the past, subjects of the crown called for democratization. Such democratizations transformed subjects of the crown into a sovereign people to whom the government was accountable. A similar democratization could reshape corporate monopolies by making corporations accountable to those over whom they hold market power. Such "economic democracy" is a potentially effective approach to market power that avoids some pitfalls of both the populist antitrust resurgence and the desire to support industrial scale in the form of "national champions" or "entrepreneurial genius."

The current limited interpretation of antitrust is based primarily on "structural remedies," such as break-ups and prohibitions of mergers, as well as top-down "behavioral remedies," that proscribe and regulate certain forms of conduct. This approach may deter or prevent the most harmful conduct, but it relies upon either regulatory elites at competition enforcers or enforced competition to protect stakeholders. This limited interpretation also traps us in a dilemma. On one hand, if we choose to allow corporations to harness the benefits of scale, we are ruled by democratically illegitimate and economically distortive monopolies, or by technocratic and largely unaccountable regulators. On the other hand, if we choose to promote break-ups, we leave national governments as the primary source of economies of scale. Antitrust policies, distrusting government intervention, tilted towards the former horn of the dilemma, to the detriment of democracy. Democracy has suffered in two ways: there is a lack of democratic control over corporations, and undemocratic control of powerful corporations over government. Recent work has shown that antitrust policies have failed even in their limited aims of defending the welfare of consumers.⁴

It is the symptoms of this "divine right of capital" that leave people all around the world restless for change. The primary manifestation of this discontent is the "antitrust revival" that has increasingly called for more break-ups and restraints on the power of dominant firms. While break-ups may be effective in some cases (such as when the products separated have few synergies), there are many industries in which the

² See, for example Tim Wu. *The Curse of Bigness: Antitrust in the New Gilded Age* (2018); Lina M. Khan. "The separation of platforms and commerce." *Columbia Law Review* 119, no. 4 (2019): 973-1098; Lina M. Khan." Amazon's antitrust paradox." *Yale LJ* 126 (2016): 710; Matthew Stoller. *Goliath* (2019); Elizabeth Warren. "Reigniting Competition in the American Economy." *Keynote speech at New America's Open Markets Program Event, June* 29 (2016).

³ Robert D. Atkinson & Michael Lind. *Big is beautiful: Debunking the myth of small business.* MIT Press, 2018 and Cowen, Tyler. *Big Business: A Love Letter to an American Anti-hero.* St. Martin's Press, 2019.

⁴ See for instance John Kwoka. *Mergers, merger control, and remedies: A retrospective analysis of US policy.* Mit Press, 2014 and Carl Shapiro. "Protecting competition in the American economy: Merger control, tech titans, labor markets." *Journal of Economic Perspectives* 33, no. 3 (2019): 69-93.

 $^{5 \ \}text{Marjorie Kelly}. \ \textit{The divine right of capital: Dethroning the corporate aristocracy}. \ \text{Berrett-Koehler Publishers, 2001}.$

⁶ See for instance Jacques Crémer, Yves-Alexandre de Montjoye, and Heike Schweitzer. "Competition policy for the digital era." *Report for the European Commission* (2019) and Motta, Massimo, and Martin Peitz. *Challenges for EU Merger Control*. University of Bonn and University of Mannheim, Germany, 2019.

"antitrust revival" approach strikes critics as both insufficient and excessive. These measures seem insufficient to those who doubt that breakups will stop the rise of super-dominant firms in sectors ruled by network effects, like network technology. These measures seem excessive to those who believe that break-ups in those areas may disrupt many of the benefits that flow from such network effects. In fact, recent results from the economics literature suggest such scale economies may be primarily responsible, even more so than the deficiencies of antitrust policy, for the rise of market power. If we could democratize market power itself, we could move beyond this stalemate.

What does it look like to democratize market power itself? "Stakeholder remedies," as we will call them, require shifting the roles of the consumer and others currently targeted by corporate power. No longer passive recipients of market outcomes whose only option is to "exit" and buy another product, consumers and other stakeholders could be empowered with "voice" as active participants in the democratic governance of markets. In some cases where break-ups are either insufficient or excessive, a firm's market power can be remedied by giving consumers, workers, and other stakeholders power over that firm. It is a simple idea and yet it holds the potential for resolving key tensions in competition policy and in our broader political landscape.

II. STAKEHOLDER REMEDIES

Imagine that a regulator discovers market power in an industry. Rather than taking punitive action against the dominant firm, we could give voice to those subject to the firm's market power. This remedy could take at least three possible forms: (i) representation at the board level for the relevant stakeholders, as in the German co-determination model, with the options to maintain a unitary board or adopt a supervisory board; (ii) a formal fiduciary duty and amendment of the legal goals of the firm as in the proposals for stakeholder capitalism or the model adopted by benefit corporations¹⁰ but with additional enforcement mechanisms; or (iii) the right of the counterparties over which the firm holds power to an exemption from competition enforcement in order that they may interact collectively and cooperatively to counterbalance the power of the dominant firm.

There has been some limited experimentation with remedies along these lines already. In the context of the ASCAP and BMI performance rights organization settlements, music users such as radio and TV stations were given the right to take the collecting societies to court over rate-setting for music licenses. So, part of the settlement was specifically aimed at empowering counterparties, as part of a broader scheme to prevent the abuse of market power.¹¹ In the private settlement of the credit card cases, Visa and Mastercard agreed to engage with collective bargaining on the part of merchants, although Congress has not supported this exemption as a general principle.¹² A key difference between these efforts and what we would propose, however, is the democratic accountability of the institutions allegedly representing stakeholders. Just as labor unions, to qualify as representatives of workers, are required to hold elections and be fiduciaries for their members, so too any organization delegated representation through stakeholder remedies must itself be democratically accountable to those it purports to represent.

The Accountable Capitalism Act proposed by Senator Elizabeth Warren pushes in a similar direction. However, the proposed legislation is much broader in scope and coarser in its application. It uses corporate size as its trigger and primarily empowers workers. Our proposal could be a supplement or a modification to such legislation. We propose a more narrowly-targeted notion of economic democracy, which short circuits the endless back and forth between the defenders of scale and the opponents of market power. We do not need to take an inflexible position on whether "big" is bad or good, a curse or a blessing — sometimes it will be one or the other and most often it will be both. Instead, we zoom in on the key harm created by scale, market power, and consider how we can remedy this distortion in a way that is both efficient and fair.

¹² Matt Stoller. Goliath. The 100-Year War between Monopoly Power and Democracy. New York: Simon & Schuster, 2019.



⁷ See for instance William E Kovacic. "Failed expectations: The troubled past and uncertain future of the Sherman Act as a tool for deconcentration." *Iowa L. Rev.* 74 (1988): 1105.

⁸ See for instance K. Sabeel Rahman. "The new utilities: Private power, social infrastructure, and the revival of the public utility concept." Cardozo L. Rev. 39 (2017): 1621.

⁹ Luis Garicano, Claire Lelarge & John Van Reenen. "Firm size distortions and the productivity distribution: Evidence from France." *American Economic Review* 106, no. 11 (2016): 3439-79.

¹⁰ Frederick Alexander. Benefit corporation law and governance: Pursuing profit with purpose. Berrett-Koehler Publishers, 2017.

¹¹ The Department of Justice is currently reviewing these consent decrees (see here: https://www.justice.gov/atr/antitrust-consent-decree-review-ascap-and-bmi-2019) and concerns have been previously voiced by stakeholders that removal of the consent decrees would harm the interests of independent publishers and songwriters in favor of the most powerful music publishers (see here: https://futureofmusic.org/article/fact-sheet/ascap-bmi-consent-decrees).

This approach also takes us beyond the confines of the "competition primacy" paradigm that assumes more competition is better, even in industries inhospitable to competition. The remedy of breaking up companies follows naturally from this deconcentration framework but, with firms continuing to align themselves to a model of corporate governance premised on shareholder value, aiming for perfect competition requires constant, almost omniscient, vigilance on the part of the enforcer to counter the myriad strategies firms will use to insert a wedge between stakeholder welfare and corporate interests. Economic democracy addresses the key harm from market power: the abuse of dominance to exploit counterparties. Wherever the system allows such abuses of market power, they will take place. At best, competition can mitigate this, though sometimes at significant cost to efficiency.

Under our stakeholder antitrust model, consumers and other market actors need not rely exclusively on national governments whose constituency might align poorly with the set of consumers and workers of a multinational firm. Instead power is given to stakeholders when market power over them has been identified. It is analogous to John Kenneth Galbraith's conception of "countervailing power." ¹³ But there is a critical modification. Galbraith thought that countervailing power would be self-generating in the market. Here, we accept the insuperable collective action barriers, and sometimes legal barriers that prevent stakeholders from coordinating their power. It is necessary for the stakeholder remedy to be administered by the enforcer and for formal rights to be given to stakeholders who would otherwise lack the platform for pooling their countervailing power.

Of course, the magnitude of these remedies would have to be modulated to the size of the market power found by the authority's investigation. Excessive voice for stakeholders over whom the firm does not hold significant power could be just as harmful as too little voice, as every stakeholder, if given too much power, will use it to exploit others. There are plenty of examples of worker cooperatives becoming protectionist guilds and of consumer cooperatives mistreating their workers. Only balanced and proportional representation of stakeholders consistently promises to improve over status quo remedies.

Measuring the degree of market power a firm holds over each of these counterparties is a substantial challenge, but is already a necessary component of every major antitrust investigation at present. In on-going formal economic work, some of us are working to determine quantitative standards for translating these measurements into the size of invoked remedies. There are many open questions. Often, the impact of market power on different stakeholders may differ widely, and the appropriate remedies may therefore vary depending on the case at hand.

In addition, there are tricky open questions about which externalities created by firms may be attributed to their market power and thus belong within the scope of a policy of stakeholder remedies. For example, some scholars, including some but not all the authors of this piece, see environmental externalities as principal harms of corporate power. The exact relationship between market power and the full range of externalities created by firms requires further research, as does who would be appropriate stakeholders in the case of such wide-ranging externalities. ¹⁴ Furthermore, firms would have the opportunity to propose other remedies that address the market power problem, such as aborting the proposed merger, if they prefer another solution over democratization.

Economic democracy widens the options available to companies. It offers greater possibilities when a company contemplates settlement, while also allowing for more ambitious enforcement as authorities need not choose between preserving purported synergies and addressing market power problems. For example, a merger with significant anticompetitive effects and efficiencies (e.g. *Alstom-Siemens*) should be subjected to an economic democracy remedy, not simply allowed to go through (or blocked).

¹³ John Kenneth Galbraith. American capitalism: The concept of countervailing power. Vol. 619. Transaction Publishers, 1993.

¹⁴ Michelle Meagher. Competition is Killing Us: How Big Business is Harming Our Society and Planet - and What To Do About It. Penguin Business September 2020

III. RESOLVING TENSIONS IN CORPORATE REGULATION

This policy framework helps resolve several of the key divisions in the current debates about competition and corporate governance. One of the central divisions is between those who advocate the importance of scale (including defenders of big business in the U.S. and of national champions in Europe) and those who believe competition is more important. Economic democracy allows us to achieve scale while restraining the harm created by market power. Indeed it may actually encourage growth, by giving counterparties incentives to work with or buy from a large firm, knowing that their collaboration will not later be exploited. It is a complement to the idea that shareholders take only from the residual of firm profits because their investment is a commitment that allows all other stakeholders to engage with the firm and invest their labor and purchasing power and supplier relationships.¹⁵

Another tension is between those who seek nation state-based regulation (to secure democratic voice) and those who favor deregulation in the process of regulatory harmonization (to allow free cross-national trade). In our model, democratic voice is central, but is built around the consumers, workers, and other counterparties of a firm without fear or favor towards the arbitrary historical borders of any particular nation state. Instead of centralized, rigid, and historically-bound regulation by national government we can insert into the market decentralized, dynamic, and flexible regulation by stakeholders, underwritten by the regulatory force of the state but not primarily implemented by the state. In fact, a vigorous regime of economic democracy might eventually give rise to new forms of cross-national democracy that can address the many challenges that transcend existing governance institutions.¹⁶

A third point of discord is between the advocates of stakeholder capitalism and defenders of shareholder value. A common critique of stakeholder value is the difficulty in identifying which stakeholder interests are to be accounted for and how to balance conflicting interests.¹⁷ Another criticism is that making company leaders responsible for stakeholders actually serves to remove accountability for management performance, in a way that rarely benefits stakeholders themselves.¹⁸ By contrast, our framework suggests a clear-cut resolution: the law already identifies which stakeholders are to be protected by acknowledging that firms have power over consumers, workers, and other stakeholders, so by giving these groups voice to represent themselves they will be able to counter corporate power in a way that goes beyond the ever-vague "exit options" promoted by defenders of shareholder value and without sole reliance on management incentives.

A final tension it resolves is between advocates of countervailing power, for example to allow workers to organize, and the advocates of aggressive antitrust enforcement. While both have long been important aspects of containing concentrations of economic power, there has long been a tension between them as some zealous antitrust advocates have been also skeptical of union power, while many advocates of unions fear antitrust laws will be brought to bear against them. ¹⁹ This framework combines the two seamlessly into a single, unified framework.

Further, democracy may, in some cases, be a more efficient economic response to market power than are break-ups, merger prohibitions or conduct restraints, although each of these will still play a role. The gradual transfer of voice to stakeholders is only a slight harm to companies that already need to account for stakeholder interests in their product design, pushing them to formalize and take these efforts more seriously. At the same time, it greatly enhances their democratic legitimacy and, if they wish to avoid stakeholder power, they can always shrink themselves and avoid accumulating market power.

IV. IMPLEMENTATION

There are many details of implementation that must be worked out. Difficult questions about the appropriate legal and economic design of the remedies remain. For example, which stakeholders will be given voice? Standard theory recognizes market power over consumers and workers. Will customers be given a seat on the board even if they are also competitors? What about when the government is a major customer? Are the rights to be granted indefinitely or would they be reversed on a showing of diminished market power or countervailing market power from a competitor? How are stakeholders to enforce their governance rights if they form a minority of the board, when currently only shareholders have a right to sue for breach of fiduciary duty? Should any complaints be directed towards the antitrust authority or towards a new kind of corporate regulator with an institutional setup better adapted to dealing with questions of corporate governance?

- 15 Colin Mayer. Firm commitment: Why the corporation is failing us and how to restore trust in it. OUP Oxford, 2013.
- 16 Colin Mayer. Prosperity: better business makes the greater good. Oxford University Press, 2018.
- 17 Michael Magill, Martine Quinzii, & Jean-Charles Rochet. "A theory of the stakeholder corporation." Econometrica 83, no. 5 (2015): 1685-1725.
- 18 Lucian A. Bebchuk & Roberto Tallarita. "The Illusory Promise of Stakeholder Governance." Available at SSRN 3544978 (2020).
- 19 On the former see Stoller, *Goliath* and on the latter see Brishen Rogers, "The Limits of Antitrust Enforcement," *Boston Review* April 30, 2018.



Furthermore, economic democracy on its own does not solve all problems. We cannot expect that stakeholders will perfectly understand how to protect their own interests in the absence of an infrastructure helping them to coordinate. Companies will continue to favor insider interests, even if an expanded list of insiders, and corporate power will be wielded to their benefit, possibly to the detriment of others. All stakeholders are not made equal — some have market power in their own right and may seek to use stakeholder empowerment to extract further rents, and probably need to be democratized themselves in line with awarding them representation (as discussed above regarding the banks in relation to Visa and Mastercard). The German approach of looking at relative market power may also be relevant in that context. In industries with very strong scale economies, even a firm making no profits will still exercise market power and would require subsidies to break even. In those cases, economic democracy can push in the right direction, but more extensive policies would be required to resolve deeper limitations of capitalism. For example, sometimes market power problems will spread beyond the boundaries of one firm and the remedy will have to be applied to whole markets. In such markets, the very nature of competition would change. In parallel to common ownership across shareholdings, common representation of stakeholders across the boards of all companies in a sector may raise its own challenges.

But well enforced and carefully implemented economic democracy is nonetheless a powerful remedy for market power deserving of further attention and exploration. It allows competition to operate within a market regulated not just by the state but by stakeholders themselves, redressing the imbalances that otherwise inevitably arise when companies exploit market imperfections to entrench their power. It also pushes us towards a broader conception of antitrust that has the potential to create a structural shift in the operation and expectations of business and the democratic management of the market economy. It is a natural and neglected next step that might allow us to move beyond our current stalemate in competition policy.

BEHAVIORAL REMEDIES IN U.S. MERGER SETTLEMENTS: PAST, PRESENT, AND FUTURE



CPI Antitrust Chronicle April 2020

I. INTRODUCTION

Although structural remedies have long been the U.S. antitrust agencies' preferred means of resolving competitive concerns raised by mergers, behavioral remedies, such as information firewalls and non-discrimination requirements, historically have been used to address competitive concerns arising from vertical mergers (i.e. mergers of businesses operating at different levels of the supply chain) while preserving the efficiency and consumer welfare benefits of vertical integration.

In recent years, however, representatives from both the Department of Justice ("DOJ") and the Federal Trade Commission ("FTC") have called into question the appropriateness of behavioral remedies and the agencies' willingness to consider them in settlements of merger enforcement actions. The Assistant Attorney General of the Antitrust Division, Makan Delrahim criticized behavioral remedies as a form of "central planning," expressing the view that they "often require companies to make daily decisions contrary to their profit-maximizing incentives," and "demand ongoing monitoring and enforcement" that the agencies are not well equipped to police effectively.² Three days later, the DOJ filed suit to block AT&T's acquisition of Time Warner Inc. — the first litigated challenge to a vertical merger in decades.³

Leadership at the FTC has likewise expressed skepticism in recent years about the effectiveness of behavioral remedies. In a 2018 speech, the then-Acting Director of the Bureau of Competition cautioned that "no one should be surprised if the FTC looks closely at a vertical merger that raises [competitive concerns], and no one should be surprised if the FTC requires structural relief." However, in conjunction with such pronouncements, and in contrast to the DOJ, FTC representatives have indicated more willingness to consider behavioral remedies to resolve vertical concerns, and have affirmed that "limited, tried-and-true behavioral remedies... can be appropriate under the right circumstances." ⁵

From these developments, many have concluded that, except where used as a limited-in-scope adjunct to a divestiture remedy, behavioral remedies are off the table when it comes to negotiating merger remedies with the DOJ — even where the competitive issues to be resolved arise from the vertical components of the merger. It appears that the FTC may be more receptive to behavioral relief in vertical mergers than the DOJ would be in analogous contexts. This article examines these assumptions, looking at the remedies used by each agency in recent years to resolve alleged vertical issues in merger enforcement actions, in order to inform what the future may hold for remedies in vertical merger settlements. It concludes that (i) the DOJ's track record over the last three years indicates that it has, in fact, substantially limited the use of the behavioral remedies; and (ii) the FTC's actions over the same time period suggests that the FTC, by contrast, remains receptive to considering behavioral relief to resolve discrete vertical competition concerns. It is unclear if the agencies' divergent track records indicate an actual conflict in their approaches to vertical remedies. Currently, the fate of a vertical merger that presents discrete competitive issues may depend on which agency reviews it.

² Dep't of Justice, Assistant Attorney General Makan Delrahim Delivers Keynote Address at American Bar Association's Antitrust Fall Forum, November 16, 2017. Delrahim went on to warn that while DOJ remained open to considering behavioral remedies, they will be limited to situations where a transaction "generates significant efficiencies that cannot be achieved without the merger or through a structural remedy"—"a high standard to meet." *Id.*

³ Julie North was a member of the litigation team representing Time Warner in the *United States v. AT&T* trial.

⁴ Remarks of D. Bruce Hoffman, Acting Director, Bureau of Competition, Fed. Trade Comm'n, Vertical Merger Enforcement at the FTC, January 18, 2018. Similarly, the now current (and at the time Deputy) Director of the Bureau of Competition noted in an official statement that the FTC "typically disfavors behavioral remedies and will accept them only in rare cases based on special characteristics of an industry or particular transaction." Statement of Bureau of Competition Deputy Director Ian Conner on the Commission's Consent Order in the Acquisition of Orbital ATK Inc. by Northrop Grumman Corp., File No. 181-0005, June 5, 2018.

⁵ Keynote Address of Christine S. Wilson, Comm'r, Fed. Trade Comm'n, Vertical Merger Policy: What Do We Know and Where Do We Go?, February 1, 2019.

⁶ For example, a requirement that the merging parties provide transition services to a divestiture buyer on a short-term basis or not solicit key employees of the divestiture business to support its viability.

II. SETTLEMENTS BY THE DEPARTMENT OF JUSTICE

A. Prior Merger Settlements (2010 – 2016)

Under the prior administration, the DOJ entered a number of consent decrees that included a range of behavioral remedies designed to prevent the merging parties from acting on alleged post-merger incentives to engage in conduct that could harm competition:

- In 2010, the DOJ approved Ticketmaster's \$2.5 billion acquisition of Live Nation subject to a consent decree that included both structural relief, to address concerns relating to horizontal overlap in primary ticketing, and behavioral relief, to address concerns relating to the vertical integration of Ticketmaster's primary ticketing service and Live Nation's concert promotion business. The behavioral remedies included a prohibition on retaliating against venue owners who want to use rival primary ticketing services, a prohibition on mandatory bundling of promotion and primary ticketing services, and a requirement that Ticketmaster either not use its ticketing data in its promoting and management businesses, or makes the data available rival promoters and managers.
- In 2011, DOJ approved Comcast's \$30 billion joint venture with NBCU Universal subject to a consent decree requiring, among other behavioral relief, that the joint venture provide programming content to online video distributors ("OVDs") on non-discriminatory terms and, in conjunction with a related FCC order, giving distributors the option to submit any content licensing disputes to baseball style arbitration.⁹
- That same year, the DOJ approved Google's \$700 million acquisition of ITA Software Inc., a developer of software enabling flight search functionality for travel websites, subject to a consent decree requiring Google to honor existing licensing contracts for ITA's software, to negotiate new licensing agreements on fair and non-discriminatory terms and to continue development of software for and offer upgrades to ITA's licensees.¹⁰
- In 2016, the DOJ approved the combination of three cable companies, forming "New Charter," subject to a consent decree that prohibits New Charter from entering into or enforcing agreements that could make it more difficult for OVDs to obtain content from video programmers. The competitive harm alleged by DOJ did not relate to vertical integration but neither was it horizontal in nature—as the DOJ explained, the parties did "not compete to provide video distribution services to consumers in the same local geographic markets." Rather, according to the DOJ, the increased user base that New Charter would acquire through the combination gave it an increased incentive to frustrate OVD competition using contractual provisions that had been employed with frequency by one of the merging parties. The behavioral remedies were designed to prevent New Charter from acting on these post-merger incentives.

B. Recent Merger Settlements (2017 -YTD 2020)

The DOJ has not entered into any new merger settlements featuring stand-alone behavioral relief since the change in DOJ leadership in 2017. With one exception discussed below, every merger settlement entered into by DOJ since 2017 that involved allegations of vertical competitive harm has required a divestiture to remedy the alleged harm:

7 Press Release, Dep't of Justice, Justice Department Requires Ticketmaster Entertainment Inc. to Make Significant Changes to Its Merger with Live Nation Inc., January 25, 2010.

8 *ld*.

9 Press Release, Dep't of Justice, Justice Department Allows Comcast-NBCU Joint Venture to Proceed with Conditions, January 18, 2011.

10 Press Release, Dep't of Justice, Justice Department Requires Google Inc. to Develop and License Travel Software in Order to Proceed with Its Acquisition of ITA Software Inc., April 8, 2011.

11 Press Release, Dep't of Justice, Justice Department Allows Charter's Acquisition of Time Warner Cable and Bright House Networks to Proceed with Conditions, April 25, 2016. Notably, that same year, the parties to a proposed vertical merger in the semiconductor industry abandoned their transaction in the face of DOJ opposition, and reportedly after remedy talks fell apart. See Press Release, Dep't of Justice, Lam Research Corp. and KLA-Tencor Corp. Abandon Merger Plans, October 5, 2016.

12 Competitive Impact Statement, United States v. Charter Communications, Inc., 16-cv-00759 (D.D.C. May 10, 2016).

13 Id.

14 *ld*.

- In 2018, the DOJ secured one of the largest ever negotiated divestiture packages in connection with Bayer AG's acquisition of Monsanto Company. The divestitures were designed to address both horizontal and vertical concerns. As to the vertical concerns, the DOJ alleged that the combination of Bayer's seed treatment business with Monsanto's leading seed business would have given the merged entity the incentive and ability to raise the costs of Bayer's rival seed treatment suppliers. To remedy this alleged harm, DOJ required Bayer to divest its seed treatment business.
- That same year, the DOJ required a divestiture to resolve concerns relating to vertical and horizontal overlaps in connection with the acquisition of Pounding Mill Quarry Corporation, a producer of aggregate, by CRH, a producer of asphalt concrete and aggregate. According to the DOJ, CRH's only rival in the supply of asphalt concrete in Southern West Virginia sourced aggregate, an essential input in asphalt concrete, from Pounding Mill, raising concerns that the transaction would give CRH an incentive and ability to disadvantage its only rival by withholding or raising the price of Pounding Mill aggregate. To remedy this vertical concern, as well as a horizontal concern created by the parties' overlap in aggregate, the DOJ required that CRH divest Pounding Mill's aggregate quarry as a condition to approving the transaction.
- Last month, the DOJ entered a consent decree conditioning the merger of United Technologies Corporation ("UTC") and Raytheon on structural relief designed to address alleged vertical issues. ¹⁹ At the time of the merger, both parties supplied critical inputs for use in EO/IR reconnaissance satellite payloads, which enable reconnaissance satellites to perform reconnaissance missions, while Raytheon also competed in the downstream payload market. ²⁰ In the upstream markets, Raytheon is a leading supplier of focal plane arrays used by payloads, while UTC was one of only two companies able to build space-based optical systems, another critical payload input. ²¹ The DOJ alleged that the combination of these capabilities would have given the merged company the incentive and ability to foreclose competition both in the downstream market for EO/IR payloads by denying Raytheon's payload rivals access to UTC's space-based optical systems and in the upstream market for space-based optical systems—by requiring EO/IR payload builders seeking to purchase Raytheon's industry-leading focal plane arrays to also purchase space-based optical systems from UTC rather than its lone competitor in that market. ²² Working closely with the Department of Defense ("DoD"), the primary user of reconnaissance satellites, the DOJ required that UTC divest its spaced-based optical systems business to ensure that the merged entity would be unable to employ such foreclosure tactics. ²³

The only settlement entered into by DOJ during this time frame that included behavioral relief was in connection with the extension and modification of the 2010 *Ticketmaster/Live Nation* final judgment. According to the allegations in the motion to modify the original final judgment, since the entry of that judgment, and in contravention of its requirements, Live Nation and Ticketmaster have "repeatedly conditioned and threatened to condition Live Nation's provision of live concerts on a venue's purchase of Ticketmaster ticketing services" and "retaliated against venues that opted to use competing ticketing services," thereby foreclosing competition in the primary ticketing market.²⁴ To address these alleged violations, and prevent future competitive harm, the DOJ and the parties stipulated to an amended order that clarifies the parties' obligations under the consent decree, extends the duration of the decree and adds additional compliance and enforcement provisions.²⁵

16 *ld*.

17 *ld*.

20 Id.

21 Id.

22 Id.

23 *ld*.

25 *ld*.

¹⁵ Press Release, U.S. Dep't of Justice, Justice Department Secures Largest Negotiated Merger Divestiture Ever to Preserve Competition Threatened by Bayer's Acquisition of Monsanto, May 29, 2018.

¹⁸ Press Release, U.S. Dep't of Justice, Justice Department Requires CRH to Divest Rocky Gap Quarry in Order to Proceed with Pounding Mill Acquisition, June 22, 2018.

¹⁹ Press Release, U.S. Dep't of Justice, Justice Department Requires Divestitures in Merger Between UTC and Raytheon to Address Vertical and Horizontal Antitrust Concerns, March 26, 2020.

²⁴ Motion to Modify Final Judgment and Enter Amended Final Judgment, *United States v. Ticketmaster Entertainment, Inc.*, No. 10-cv-00139 (D.D.C. January 25, 2010) ("Ticketmaster Motion to Modify").

III. SETTLEMENTS BY THE FEDERAL TRADE COMMISSION

Between 2017 and year-to-date 2020, the FTC has entered four merger settlements that featured stand-alone behavioral relief:

- In 2017, the FTC approved Broadcom Limited's acquisition of Brocade Communications Systems, Inc., subject only to behavioral conditions. At the time, Brocade and Cisco Systems, Inc. were the only two suppliers of fibre channel switches, and Broadcom supplied custom-tailored application specific integrated circuits ("ASICs") to both for use in their respective switch fibre channel products. As Cisco's ASIC supplier, Broadcom had extensive access to competitively sensitive information relating to Cisco's fibre channel switch business. The FTC alleged that, without a remedy, Broadcom post-merger could use Cisco's competitively sensitive confidential information to unilaterally, or in coordination with Cisco, raise prices or slow innovation in the fibre channel switch market. Rather than require a divestiture, however, the FTC agreed to a consent that required Broadcom to establish a firewall between its business team responsible for developing Cisco's customized ASICS and the rest of the company, subject to the oversight of a monitor.
- That same year, the FTC agreed to settle charges that the proposed merger of Enbridge Inc. and Spectra Energy Corp., two natural gas pipeline operators, would, absent relief, reduce competition in local markets for pipeline transportation of natural gas by giving Enbridge an ownership interest in the two closest and likely lowest cost natural gas pipelines in the area. The settlement required the establishment of firewalls to limit Enbridge's access to non-public information about one of the competing pipelines in the market and recusal of certain board members from votes involving that pipeline.
- In 2018, the FTC accepted a consent agreement with only behavioral conditions in connection with its approval of Northrop Grumman Corporation's acquisition of Orbital ATK, Inc.³³ According to the FTC, Northrop is one of four companies capable of supplying the DoD with missile systems, while Orbital ATK is the leading supplier of solid rocket motors ("SRMs"), an essential input for missile systems.³⁴ The FTC alleged that, absent relief, Northrop's ownership of Orbital's SRM business would give Northrop an incentive and ability to withhold access to or increase the prices of Orbital SRMs to rival missile system suppliers, leading to higher prices or reduced output.³⁵ To prevent Northrop from acting on these alleged incentives, the FTC required Northrop to agree to supply its SRMs and related services on non-discriminatory pricing, scheduling, quality, data, design, risk and other terms to any competitor seeking SRMs for a missile contract with DoD.³⁶ The consent also requires Northrop to establish safeguards preventing the misuse of any proprietary information it receives from competing missile system contractors or SRM suppliers.³⁷ The settlement also provides that the appointment by the DoD's procurement unit of a compliance officer with broad authority to oversee Northrop's compliance with the consent.³⁸

26 Press Release, Fed. Trade Commin, FTC Accepts Proposed Consent Order in Broadcom Limited's \$5.9 Billion Acquisition of Brocade Communications Systems, Inc., 2017.
27 <i>ld</i> .
28 <i>Id.</i>
29 <i>Id.</i>
30 <i>ld</i> .
31 Press Release, Fed. Trade Comm'n, FTC Preserves Competition in Merger of Enbridge Inc. and Spectra Energy Corp., February 16, 2017.
32 <i>Id.</i>
33 Press Release, Fed. Trade Comm'n, FTC Imposes Conditions on Northrop Grumman's Acquisition of Solid Rocket Motor Supplier Orbital ATK, Inc., June 5, 2018.
34 <i>Id.</i>
35 <i>Id.</i>
36 <i>Id.</i>
37 <i>Id.</i>
38 <i>ld</i> .

• In 2019, the FTC approved Staples, Inc.'s acquisition of Essendant Inc. subject only to behavioral conditions. According to the FTC, Staples is one of the largest vertically integrated resellers of office products in the U.S., while Essendant operates the largest office product wholesale distribution business in the U.S. The FTC alleged that, absent relief, the combination of these vertically-related businesses would lead to competitive harm in the downstream market for reselling office supply products to mid-market end-customers. According to the FTC's allegations, Staple's competitors in that market need to supply Essendant with competitively sensitive information in order to use Essendant's prepackaged product delivery services. The FTC alleged that, with access to this information, as well as information relating to the cost of goods of Essendant's resellers, Staples would be able to increase prices on end-customers in the market for business-to-business office supplies. The settlement addresses this vertical concern by requiring Staples to implement a firewall between its business-to-business operations and Essendant's wholesale business.

IV. TAKEAWAYS FROM THE AGENCIES' MERGER SETTLEMENTS

First, although the sample size of DOJ vertical merger enforcement actions is limited—as is widely acknowledged, vertical integration is often "procompetitive or competitively neutral," and, presumably, most vertical mergers subject to DOJ review have been, and will continue to be, cleared without conditions—the DOJ's recent track record appears consistent with the view that the DOJ has closed the door to behavioral relief, even for the limited cases that, in the DOJ's view, present vertical competition concerns. Although the DOJ agreed to modify and extend the duration of the behavioral remedies of the *Ticketmaster/Live Nation* final judgment — rather than, as was advocated by at least one interest group, seek to unwind the transaction — it has since signaled that its willingness to agree to behavioral relief in that case should be viewed as a one-time exception. Indeed, the DOJ has indicated that its experience investigating and enforcing the original *Ticketmaster/Live Nation* final judgment has only reinforced its position that behavioral remedies are problematic and disfavored.

Second, it appears that the FTC has been more open to considering behavioral relief in merger settlements than the DOJ, but it is not clear if there is an actual conflict, or only a perceived one.⁴⁸ Although the FTC has agreed to behavioral remedies in a handful of merger settlements over the last few years, in all but one case, the remedy was limited to internal firewalls, which are generally seen as less "regulatory" in nature than externally-facing behavioral requirements such as non-discrimination and non-retaliation conditions.⁴⁹ Moreover, in conjunction with the settlement of its challenge to the Northrop/Orbital ATK merger — in which the FTC accepted a non-discrimination requirement to resolve vertical concerns — the FTC Bureau of Competition took the unusual step of issuing an official statement from its then-Deputy Director stressing that it "typically disfavors behavioral remedies and will accept them only in rare cases based on special characteristics of an industry or particular

39 Sycamore Partners II, L.P., FTC File No. 181-0180 (January 28, 2019).

40 *ld*.

41 *ld*.

42 Id.

43 Dep't of Justice, Assistant Attorney General Makan Delrahim Delivers Opening Remarks for the Workshop on the Proposed Vertical Merger Guidelines, March 11, 2020.

44 It is also worth noting that the modified final judgment includes a range of monitoring and compliance provisions — including the appointment of an independent monitor with broad investigatory powers, reporting obligations, appointment of an antitrust compliance officer, mandatory employee compliance training, whistleblower protections, and a penalty of one million dollars for each future violation — that appear designed to address the DOJ's concern that behavioral remedies require aggressive and proactive monitoring by DOJ and waste agency resources, and could provide a roadmap for ensuring the effectiveness of future behavioral settlements. See Ticketmaster Motion to Modify at 12-15. The DOJ added similar provisions to the modified final judgment entered in 2018 in connection with Anheuser Busch InBev SA/NV's acquisition of SABMiller, which includes behavioral remedies as part of the original settlement entered into in 2016. Modified Final Judgment, *United States v. Anheuser Busch InBev SA/NV*, No. 16-cv-1483 (D.D.C. October 22, 2018).

45 See Letter from Diane L. Moss, President, American Antitrust Institute, Re: Amended Final Judgment: U.S. v. Tickemaster Entertainment, Inc., and Live Nation Entertainment, Inc., February 4, 2020, available at https://www.antitrustinstitute.org/wp-content/uploads/2020/02/AAI Ltr-to-DOJ LN-TM_F.pdf.

46 Joshua Sisco, Live Nation Consent Decree Shows Problems with Behavioral Remedies, DOJ Official Says, mLex, January 23, 2020.

47 Id

48 In one merger settlement entered into by the FTC during this time frame, the FTC did require a divestiture to address vertical concerns, but the divestiture also resolved a problematic horizontal overlap in the relevant market, and it is impossible to know whether the FTC would have required the divestiture if the transaction raised only the vertical competition issues alleged by the FTC. See Analysis of Agreement Containing Consent Orders to Aid Public Comment, UnitedHealth Group Incorporated, FTC File No. 181-0057, June 19, 2019.

49 It is worth noting, however, that the FTC's settlement in *Staples/Essendant* drew dissenting opinions from the two Democratic Commissioners, asserting that the alleged vertical harms were not sufficiently addressed by the firewall remedy, including because, "[g]iven the hundreds of customers and resellers of Essendant, it may be difficult to police the firewall, especially with oral communications." Statement of Commissioner Rohit Chopra, Sycamore Partners II, L.P., FTC File No. 181-0180, January 28, 2019.

transaction."⁵⁰ The statement goes on to describe the special characteristics of the defense industry that made vertical relief appropriate for that transaction, including the FTC's close coordination with the DoD, the only buyer in the industry, the DoD's need for sophisticated products and the success of prior merger consents that relied on behavioral remedies to prevent vertical harms in the defense industry.⁵¹

V. CONCLUSION

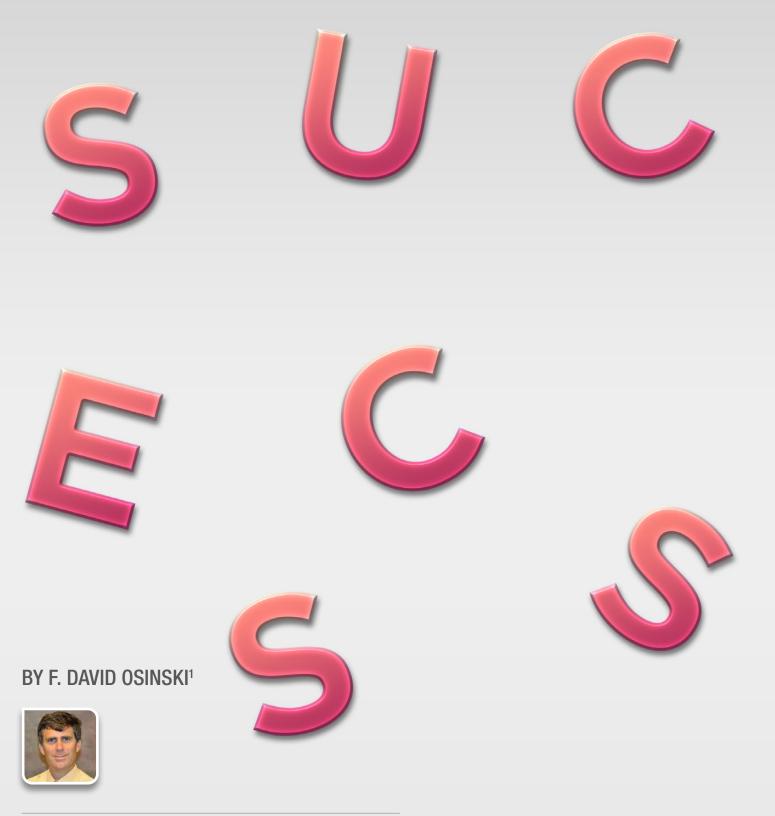
The DOJ under the current administration has been unreservedly critical of the use of behavioral remedies in vertical merger settlements. Its approach to behavioral remedies in practice appears consistent with these policy views. By contrast, the FTC, while likewise disfavoring their use, appears willing to consider behavioral remedies to address discrete competition issues arising from vertical mergers while preserving the benefits of vertical integration. Whether there is an actual conflict between the agencies' respective approaches to vertical merger remedies, or only an apparent one, is unclear. Although the agencies' draft Vertical Merger Guidelines, which addresses the agencies' analytical approach for assessing the competitive effects of vertical mergers, aim to provide "[g]reater transparency about the complex issues surrounding vertical mergers, [which] will benefit the business community, practitioners, and the courts," practitioners should be aware of the difference in application when it comes to remedying vertical competitive concerns.⁵²

⁵⁰ Fed. Trade Comm'n, Statement of Bureau of Competition Deputy Director lan Conner on the Commission's Consent Order in the Acquisition of Orbital ATK, Inc. by Northrop Grumman Corp., File No. 181-0005, June 5, 2018.

⁵¹ *Id.* One can only speculate as to whether the DOJ would have agreed to the behavioral remedies accepted by the FTC in these cases if the same vertical factors had been present in transactions subject to the DOJ's review. It is perhaps notable, however, that the one defense industry merger reviewed by the DOJ that raised vertical concerns in this time frame was resolved with a divestiture.

⁵² Press Release, Fed. Trade Comm'n & Dep't of Justice, DOJ and FTC Announce Draft Vertical Merger Guidelines for Public Comment, January 10, 2020.

DEFINING REMEDY SUCCESS



¹ Economist, Antitrust Division, U.S. Federal Trade Commission. The views expressed in this article are those of the author and do not necessarily reflect those of the U.S. Federal Trade Commission or any individual Commissioner. Thank you to the CPI Antitrust Chronicle for encouraging this work, including Sam Sadden and Maria Coppola. Thanks to Matthew Chesnes, Daniel Ducore, Daniel Greenfield, and David Schmidt for helpful comments. The author is responsible for all remaining errors.

I. INTRODUCTION

In the United States, the Federal Trade Commission ("FTC") or the Antitrust Division of the Department of Justice ("DOJ") may seek to block a merger deemed harmful to competition. Alternatively, the agencies and merging parties may agree to modify the transaction to remedy the competitive harm. These remedies are a common tool for merger policy. In fiscal years 2017 and 2018, forty-four of the eighty challenged mergers in the U.S. ended with remedies.² The success of merger remedies remains an ongoing topic of debate in antitrust policy circles, punctuated by a few recent high-profile divestitures that appear to have failed in maintaining pre-merger levels of competition. Notable examples include Albertsons' 2014 acquisition of Safeway and Hertz' 2012 acquisition of Dollar Thrifty. In both cases, the acquirer filed for bankruptcy soon after, with the merged entity eventually acquiring some of the same assets it divested in response to competitive concerns.³ Some interpret these and other allegedly inadequate remedies as indicators of lax enforcement for decades,⁴ although the robustness of these conclusions have been challenged.⁵ Others believe these "failures" represent one tail of a distribution of outcomes rather than intentionally lenient standards. Merger enforcement is inherently prospective, requiring predictions of incentives and behavior to forecast competitive effects. Assessing the precision of past predictions can improve future accuracy. These "failures" thus provide a learning opportunity.

Despite the policy interest, economic research sheds little light on remedy outcomes. The empirical literature performing retrospective assessments of mergers is sufficiently large that we have dozens of published studies and multiple literature reviews. However, I am aware of only three retrospective studies of merger remedies, all involving structural relief to resolve horizontal overlap. This shortage of remedy research has been lamented since at least 2003, and more recently in public statements by FTC commissioners. This leaves antitrust agencies to carry most of the burden in assessing remedy effectiveness. Thus, the majority of our understanding of remedy success and failure comes from antitrust regulators themselves. Elsewhere, I have described those studies and advocated for more remedy retrospectives, especially from researchers outside the antitrust agencies.

Remedies provide a rich environment to address endless questions. What factors render a remedy more or less successful? How do pricing incentives change in divestitures of differentiated products? Do behavioral remedies in vertical mergers successfully limit the conduct of merging firms?

This article explores one such question: How do we measure remedy success? The remainder of this article describes the varying policy standards for assessing remedies, followed by two examples showing how a remedy's "success" could hinge on which standard one applies.

⁹ See Osinski, F.D., 2017, "Merger Remedies and the Undersupply of Economic Research," ABA Economics Committee Newsletter, 18:2, 5-18.



² See Federal Trade Commission, 2018, "Hart-Scott-Rodino Annual Report: Fiscal Year 2017" and Federal Trade Commission, 2019, "Hart-Scott-Rodino Annual Report: Fiscal Year 2018."

^{3 &}quot;Albertsons to Buy Back 33 Stores It Sold as Part of Merger With Safeway," November 24, 2015, in *Wall Street Journal*. "How the FTC's Hertz Antitrust Fix Went Flat," December 8, 2013 in *Wall Street Journal*.

⁴ See Kwoka, J., 2015, Merger, Merger Control, and Remedies, Cambridge: MIT Press.

⁵ See Vita, M.G. and F.D. Osinski, 2018, "John Kwoka's Mergers, Merger Control, and Remedies: A Critical Review," *Antitrust Law Journal*, 82:1; Langenfeld, J., 2017, "The Empirical Basis for Antitrust: Cartels, Mergers, and Remedies," *International Journal of the Economics of Business*, 24: 2, 233-250.

⁶ Notable literature reviews of merger retrospectives include Kwoka, J., 2015, *Merger, Merger Control, and Remedies*, Cambridge: MIT Press, and Ashenfelter, O., D. Hosken & M. Weinberg, 2014, "Did Robert Bork Understate the Competitive Impact of Mergers? Evidence from Consummated Mergers," *Journal of Law and Economics*, 57:S3, S67-S100.

⁷ See Tenn, S. & J.M. Yun, 2011, "The Success of Divestitures in Merger Enforcement: Evidence from the J&J-Pfizer Transaction," *International Journal of Industrial Organization*, 29, 273-282; Friberg, R. and A. Romahn, 2015, "Divestiture Requirements as a Tool for Competition Policy: A Case from the Swedish Beer Market," *International Journal of Industrial Organization*, 42, 1-18; and Osinski, F.D., and J.A. Sandford, 2020, "Evaluating mergers and divestitures: A casino case study," SSRN working paper #3008770.

⁸ See Farrell, J., 2003, "Economic Analysis and the Choice of Remedies," in *Merger Remedies in American and European Union Competition Law* (F. L'eveque and H. Shelanski, eds, 2003). "Yet, while there is a lot of economics literature on the effects of mergers, I am not aware of much on merger fixes and divestitures."

II. DIFFERING STANDARDS

The typical goal of a merger remedy is to maintain or restore competition otherwise lost from the merger while allowing the benefit of efficiencies. This raises two separate issues. The first focuses on the remedy: Did the divested asset or modified behavior maintain pre-merger levels of competition? Let's call this the competition effect. The second considers merger benefits: Did the modified merger create pro-competitive efficiencies? Let's call this the efficiency effect. The total effect is the sum of the two. This parallels the standard merger analysis: an upward pricing pressure ("UPP") analysis first considers the incentive to increase price from greater market power then examines any potentially offsetting incentives to reduce price due to efficiencies. The net UPP equals the sum of the competition and efficiency effects.

A remedied transaction is no different. Consider an agency weighing whether to accept a remedy versus challenge the transaction, i.e. no transaction at all. The competition effect reflects the effect the remedy has on competition relative to pre-merger levels. An over-remedied transaction would have a negative competition effect, while an under-remedied transaction has a positive competition effect. The latter are most relevant for this discussion, as these represent situations where the transaction may create incentives to increase price, potentially requiring consideration of efficiencies. Whether one deems a remedy successful depends on the relative weighting of the competition and efficiency effects. Must a successful remedy fully eliminate the competition effect, or is it sufficient if efficiencies offset any lost competition?

Consider the DOJ's 2011 remedy guidance. It describes the key principle underlying a successful remedy as "preserving competition," which it further clarifies as follows:

For simplicity of exposition, this Policy Guide uses the phrase 'preserving competition' throughout, which should be understood to include the concept of restoring competition or enhancing consumer welfare, depending on the specific facts of the transaction and its proposed remedy.¹¹

The two standards largely differ in their treatment of efficiencies. In short, the DOJ guidance provides two possible goals. "Enhancing consumer welfare" indicates the competition and efficiency effects receive equal weight: a remedy would succeed if the sum of the two effects were net beneficial to consumers. "Restoring competition" suggests a greater weight placed on the competition effect, with the extreme case of zero weight on the efficiency effect. In short, the *restoring competition* standard focuses entirely on preserving the degree of competition from non-merging parties, while the *consumer welfare* standard includes this as well as any benefits on the merging parties that may be passed on to consumers.

The FTC's most recent remedy study is more consistent with *restoring competition* than *consumer welfare*. The study states: "the goal of any remedy is to preserve fully the existing competition in the relevant markets at issue." The FTC remedy study analyzed orders using three methods: case study, questionnaire response, and information already available in the pharmaceutical industry. For case studies, the FTC considered a successful remedy as follows:

For horizontal mergers with a structural remedy, the focus was the competitive significance of the buyer of the divested assets (i.e. the new competitor created by the Commission's order). The principal question was whether the buyer maintained the competition that existed in the market before the merger. For horizontal mergers with a non-structural remedy, staff attempted to determine whether the conditions created by the order to enhance the possibility of growth by smaller market incumbents or to promote entry appeared to work by evaluating both incumbent growth and new entry. Finally, for vertical mergers, where non-structural remedies, such as firewalls, were designed to inhibit behavior that could facilitate vertical foreclosure or the sharing of confidential business information, staff focused on, among other questions, whether respondents effectively monitored and enforced them.¹³

¹⁰ ICN, Merger Remedies Guide, www.internationalcompetitionnetwork.org/uploads/library/doc1082.pdf.

¹¹ https://www.justice.gov/sites/default/files/atr/legacy/2011/06/17/272350.pdf. Note AAG Makan Delrahim rescinded these 2011 guidelines in a September 25, 2018 speech, reinstating the 2004 remedy guidelines pending an updated policy. The 2004 guidelines place greater emphasis on restoring competition than consumer welfare, see page 4: "Restoring competition is the key to an antitrust remedy." The only mention of welfare in the 2004 guidelines occurs in the context of conduct remedies that ban price discrimination (p. 8).

¹² FTC (2017) Federal Trade Commission, 2017, "The FTC's Merger Remedies 2006-2012", p. 15.

¹³ *Ibid.*, p. 16. Note the FTC study assessed success slightly differently for remedies not analyzed via the case study framework. For remedies analyzed via questionnaire responses and in the pharmaceutical industry, FTC staff categorized a remedy as a success if the divested assets/products were still operating post-divestiture. The difference in defining success stems from differences in available information rather than differing standards. Thus, I adopt the case study definition here because those remedies provided the most information to the FTC.

In all cases, the FTC remedy study focuses on the remedy itself and its impact on non-merging firms. The FTC remedy study does not consider the deal more broadly, including efficiencies that may have passed through to consumers. ¹⁴ This is akin to examining only the competition effect while ignoring the efficiency effect. It remains unclear whether the study did not address efficiencies because the authors did not believe it was relevant, or because the study design did not permit analysis of efficiencies.

The economics literature echoes these differing standards. Some studies focus on the divested assets, consistent with a *preserving competition* standard. For example, Tenn & Yun (2011) find no change in the performance of six brands divested from J&J's 2006 acquisition of Pfizer's consumer health division.¹⁵ The focus is the divested products with no analysis of products retained by the merged entity, both within the six overlap markets as well as potential benefits to products in non-overlap markets.

Some studies focus on price and welfare, consistent with a *consumer welfare* standard. Friberg & Romahn (2015) estimate a random coefficients demand model comparing simulated merger effects to actual post-merger prices, finding the divestitures constrained beer price increases of merging firms in Sweden, and thus benefited consumers relative to a merger without divestitures.¹⁶ Gowrisankaran, Nevo & Town (2015) assess the impact on prices and welfare when simulating the impact of a behavioral remedy on a hospital merger.¹⁷ Kwoka (2015), in assessing the effectiveness of antitrust policy, asserts that all price changes following a merger or remedy should be zero under an effective policy.¹⁸

Some studies distinguish competition and efficiency effects by examining performance of the merged firms separately from other firms. Duso et al. (2011) analyze stock price movements surrounding 151 European merger investigations. They separate competition and efficiency effects by examining movements in stock market prices on merging firms versus competitors: increasing market power implies greater profits for both merging and rival firms, while efficiencies imply increasing profits for the merging firms but lower profits for rivals. Osinski & Sandford (2020), discussed further below, perform a retrospective study of a St. Louis casino divestiture. They find the divested asset declined in performance following the divestiture, suggesting a potentially weak remedy, while also finding an output increase at the merged firm, suggesting merger efficiencies. Use the merged firm of the divestiture increase at the merged firm, suggesting merger efficiencies.

Let us now consider two examples, one horizontal and one vertical, to highlight how these differing standards arise in practice.

III. EXAMPLE #1: HORIZONTAL MERGER WITH DIVESTITURE REMEDY

In December 2012, Pinnacle Entertainment entered into an agreement to purchase Ameristar Casinos for approximately \$2.8 billion. At the time, Pinnacle owned eight properties with one in development, while Ameristar owned nine properties with one in development. In May 2013, The Federal Trade Commission filed an administrative complaint alleging the merger would lessen competition for casino services in two areas: St. Louis, Missouri and Lake Charles, Louisiana. In August 2013, the FTC, Pinnacle, and Ameristar announced a consent agreement settling the FTC's charges, in which the parties agreed to divest one property in St. Louis and a property under development in Lake Charles.

Osinski & Sanford (2020) perform a retrospective analysis of merger effects on the St. Louis divestiture.²¹ The modified merger results in two casinos merging (Ameristar and River City) and one divested (Lumière).²² Pinnacle, the largest St. Louis casino operator both before and after the merger, saw its share increase from 42 percent to 58 percent. Even with the remedy, the HHI increased by 805 to 4,267.

- 14 Note the FTC's 2017 remedy study has no mention of the words "efficiency" or "efficiencies."
- 15 Tenn, S. & J.M. Yun, 2011, "The Success of Divestitures in Merger Enforcement: Evidence from the J&J-Pfizer Transaction," *International Journal of Industrial Organization*, 29, 273-282.
- 16 Friberg, R. & A. Romahn, 2015, "Divestiture Requirements as a Tool for Competition Policy: A Case from the Swedish Beer Market," *International Journal of Industrial Organization*, 42, 1-18. See Kwoka, J., 2015, *Merger, Merger Control, and Remedies*, Cambridge: MIT Press.
- 17 Gowrisankaran, G., A. Nevo & R. Town, 2015, "Mergers When Prices Are Negotiated: Evidence from the Hospital Industry," American Economic Review, 105:1, 172-203.
- 18 Assessing the effectiveness of merger policy based on a universally zero price effect seems unrealistic for several reasons. Given uncertainty surrounding policy predictions, one would expect a distribution of price effects across mergers, even with an average effect of zero. However, the average price effect may not be zero, even under effective enforcement, based on the nature of merger activity. Price reductions are expected for efficiency-enhancing mergers. Price increases may arise for consummated mergers, where the remedies available to agencies are often very different from those available pre-consummation.
- 19 Duso, T., K. Gugler & B. Yurtoglu, 2011, "How Effective is European Merger Control?," European Economic Review, 55:7, 980-1006.
- 20 Osinski, F.D., & A. Sandford, 2020, "Evaluating mergers and divestitures: A casino case study," SSRN working paper #3008770.
- 21 *Ibid*.
- 22 The description of the *Pinnacle/Ameristar* transaction and retrospective study is available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3008770.



The study examines output and price for the four casinos in St. Louis, Missouri.²³ Results show Lumière performed worse post-merger, as shown through lower output.²⁴ This indicates the divestiture may not have fully replaced the lost competition. However, results also indicate no notable price increases from the merging parties. This indicates Pinnacle's market power did not increase, despite higher concentration. Results also show increasing overall output, largely due to increased gaming activity at the two merging casinos. This suggests the merging parties enjoyed efficiencies, rendering them more attractive to customers post-merger. Aggregate gaming activity was higher after the remedy. This output expansion with no price increase suggests consumer welfare increased from the merger, even if the remedy was only partially successful at replacing lost competition.

For this transaction, remedy "success" hinges on the standard applied. Lumière's weaker performance indicates the divestiture may not have fully replaced lost competition. This suggests the remedy would fail the *restore competition* standard. However, the higher aggregate output with no price rise indicates the remedied transaction increased consumer welfare, likely due to merger efficiencies. This suggests the remedy would satisfy the *consumer welfare* standard. With the benefit of hindsight, was this remedy a success? If faced with the same situation, would the FTC approve this remedy again?

IV. EXAMPLE #2: VERTICAL MERGER WITH CONDUCT REMEDY

In September 2018, Staples' parent company, Sycamore Partners, announced it was purchasing Essendant for nearly \$1 billion in cash and assumed debt. Essendant is the largest U.S. wholesale distributor of office products, selling to firms that resell office products, such as Staples and Amazon. Staples competes downstream with many of Essendant's reseller customers in the sale and distribution of office products and related services to midmarket business-to-business customers.

In January 2019, the FTC voted 3-to-2 to issue a complaint and accept a consent order.²⁵ The complaint raised concerns that Staples would gain access to information about Essendant's reseller customers. Because Staples competes with these resellers, Staples could potentially use this information when making competitive decisions, offering higher prices than it otherwise would when bidding against an Essendant customer. The consent order restricts access to this competitively sensitive information to only certain Staples employees.

The three majority commissioners issued two public statements in support of the enforcement action, while the two minority commissioners issued two public statements of their own. The majority viewed the competitive concerns as vertical, ²⁶ while the minority also raised concerns about horizontal overlap. ²⁷ The majority dismissed the need to evaluate efficiencies given the lack of remaining competitive concerns, ²⁸ but even so, benefits from the elimination of double marginalization are likely significant as a matter of economic theory. ²⁹ Dissenters expressed concern that the remedy may only partially resolve harm in the relevant market, ³⁰ and that the parties did not meet their burden to substantiate efficiencies claims that might offset competitive harm. ³¹

- 23 Output is the dollar amount of slot machine bets placed, called the handle. Price denotes the expected loss for each dollar bet, called the hold rate, which measures the house advantage. For example, a 5 percent hold rate means a \$10 bet will on average return \$9.50, with the casino retaining \$0.50.
- 24 To be precise, the study examines Lumière's performance relative to a control group as a means of assessing what might have occurred absent the merger. As a practical point, the ability to quantify a remedy's "success" relies on establishing a proxy for this counterfactual world. It is not always possible, even in hindsight, to determine with certainty what would have occurred if a particular merger or divestiture did or did not occur.
- 25 For links to the *Staples/Essendant* complaint and consent order, as well as the commissioner statements, see https://www.ftc.gov/news-events/press-releases/2019/01/ftc-imposes-conditions-staples-acquisition-office-supply.
- 26 "Following a staff investigation that considered several possible vertical and horizontal theories of competitive harm, the Commission has voted 3-2 to issue a complaint and accept a settlement, which would resolve the only competitive concern [access to competitively sensitive information of Essendant's customers] arising out of this transaction that is supported by the evidence." (joint majority statement, p. 1).
- 27 "At first glance, the transaction is a vertical merger, but it also raises important horizontal concerns." (Chopra statement, p. 1). "I also agree with many of the points raised by Commissioner Chopra in his dissent; he has done a thorough job outlining the horizontal elements of this transaction and articulating important points for the Commission's consideration." (Slaughter statement, p. 1).
- 28 "[0]ur decision does not rest on efficiencies, but rather on the absence of evidence that this acquisition will result in anticompetitive harm outside of the specific area addressed in our order." (joint majority statement, p. 3).
- 29 "Focusing solely upon the narrow circumstances under which anticompetitive effects are plausible, economic theory suggests that the potential gains from EDM [elimination of double marginalization] are likely significant." (Wilson statement, p. 5).
- 30 "While the firewall will reduce the chance of misuse of data, it does not eliminate it." (Chopra statement, p. 5).
- 31 "Confronted, as I am, with what I believe to be evidence of likely harm and a lack of evidence of cognizable, offsetting efficiencies, I must respectfully disagree with the majority that the transaction is unlikely to result in anticompetitive harm outside the scope of the Commission's order." (Slaughter statement, p. 9).

These commissioner statements highlight the importance of the relevant standard. Consider a vertical merger where the conduct remedy is partially effective, but not 100 percent, as the dissenting commissioner statements assert. Such a remedy by definition fails the "restore competition" standard. However, if benefits from the merger exceed the harm, the remedied transaction would still satisfy the consumer welfare standard even for a remedy that only partially restores lost competition. Given the balancing of harm versus efficiencies, it appears the dissenting commissioners in *Staples/Essendant* adopt something more akin to a *consumer welfare* standard, versus the *restoring competition* standard employed in the FTC's 2017 remedy study.

V. WHAT NEXT?

Research of merger remedy retrospectives remains shockingly thin. It is nonexistent for vertical mergers: I am not aware of any published papers empirically assessing a vertical merger remedy. Commissioner Slaughter's public statement on *Staples/Essendant* requests a retrospective study of this remedy specifically, as well as a more general practice for the FTC to assess retrospectively its merger enforcement decisions. Yet this would not overcome the fact that antitrust agencies supply the vast majority of remedy assessments. Some have raised concerns that the agencies are prone to grade inflation, setting low bars to exaggerate success rates.³² Given these recent calls for more remedy retrospectives, how can outsiders assess whether agencies succeeded if success is not well defined?

Merger policy is a balancing act. Overly aggressive policy risks deterring beneficial transactions. Overly lax policy risks allowing un-remedied or under-remedied harmful combinations. The fact that regulators face uncertainty and must predict merger outcomes makes this balancing act even more difficult to achieve. Before we can assess whether the agencies' remedy predictions were accurate, we first must establish the primary input: How do we measure remedy success?

NON-SELF-ENFORCING REMEDIES AND THE RECENT MODIFICATION TO THE *TICKETMASTER/LIVE NATION* MERGER CONSENT DECREE



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I. INTRODUCTION

Merger remedies may be offered by the merging parties or demanded by antitrust enforcers in cases in which a merger promises benefits to consumers but also risks harm to competition in one or more markets. Blocking such a merger would certainly prevent the competitive harm from occurring, but it would also deny the consumer benefits that would otherwise flow from the combination of assets. Remedies that reliably target the source of competitive harm allow society to reap the benefits of efficiency-enhancing mergers that would, in the absence of remedies, raise competitive concerns. In this article, we consider the economic issues that arise in developing merger remedies — and in particular discuss the use of self-enforcing versus non-self-enforcing remedies. We then discuss how these issues relate to the recent concerns raised by the Department of Justice ("DOJ") regarding whether Live Nation was following the requirements of the remedy associated with its merger with Ticketmaster in 2010.

II. SELF-ENFORCING AND NON-SELF-ENFORCING REMEDIES

Merger remedies can be distinguished by whether or not they require ongoing enforcement by the antitrust authorities. Self-enforcing remedies, also referred to as structural remedies, are those that do not require ongoing enforcement. These remedies often involve the sale of physical assets or the sale or licensing of intellectual property ("IP") rights by the merging firms to strengthen existing competitors or create new competitors. Non-self-enforcing remedies, also referred to as behavioral or conduct remedies, require ongoing monitoring by the antitrust authorities and involve constraints on post-merger conduct by the merged firm. Examples include firewall and non-discrimination provisions.

Self-enforcing remedies are typically preferred by antitrust enforcers. However, antitrust enforcers may be willing to consider behavioral remedies if structural remedies are not practical or would also eliminate significant competitive benefits from the transaction as whole. For example, guidance issued by the Federal Trade Commission ("FTC") in 2012 indicates a willingness to consider non-structural remedies in some circumstances. Similarly, the remedies policy guide issued by the Antitrust Division of the DOJ in 2011 expressed openness towards a variety of remedies, noting that both structural and conduct remedies may be usefully employed, depending on the particular circumstances of the proposed merger. However, recent DOJ statements indicate that they currently are less willing to consider non-structural remedies. DOJ's resistance to non-structural remedies is demonstrated by its rejection of remedies offered by the parties in the *AT&T/Time Warner* merger even though it had accepted similar remedies in the *Comcast/NBC-Universal* merger. As we discuss further below, DOJ's concerns about non-structural remedies may be further increased given its experience with the consent in the *Live Nation/Ticketmaster* transaction.

It is straightforward to demonstrate why antitrust authorities prefer self-enforcing remedies. Consider a merger that provides an incentive for the merged firm to raise price.⁶ Now consider two remedies that promise to restore the pre-merger competitive outcome. The first remedy changes the merged firm's incentives so that it no longer would be profitable for it to raise prices. This remedy would be self-enforcing and not require ongoing governmental oversight because the pre-merger competitive outcome is restored by changing the firm's incentives. The second remedy involves a promise or commitment by the merged firm not to raise prices, even though it still has the incentive to do so post-merger. The second remedy thus requires the firm to act against its self-interest and requires an effective commitment mechanism, such as ongoing monitoring and the assessment of penalties if the firm does not fulfil its commitment. Antitrust enforcers typically prefer the first remedy to the second remedy because reliance on market forces to discipline firm behavior is viewed as being more effective and less costly.

² Negotiating Merger Remedies, Statement of the Bureau of Competition of the Federal Trade Commission, January 2012, p. 5.

³ Antitrust Division Policy Guide to Merger Remedies, US Department of Justice, Antitrust Division, June 2011 (the DOJ 2011 Policy Guide), p. 4.

⁴ For example, DOJ Assistant Attorney General Makan Delhrahim stated in September 2018: "We are also taking a close look at our remedies policy. Negotiating remedies to anticompetitive mergers often adds significant time to the merger review, and our commitment to shortening the duration of merger reviews extends to the remedies phase. While our review is underway, I want to be transparent with the bar about what the Division's practices will be. To that end, today, I announce the withdrawal of the 2011 Policy Guide to Merger Remedies. The 2004 Policy Guide to Merger Remedies will be in effect until we release an updated policy." See DOJ Assistant Attorney General Makan Delrahim's "Remarks as Prepared for the 2018 Global Antitrust Enforcement Symposium," September 25, 2018, available at https://www.justice.gov/opa/speech/file/1096326/download, site visited May 9, 2019. Thus, DOJ's remedies policy is apparently in a state of flux. We still view the DOJ 2011 Policy Guide as the most current statement by the DOJ regarding its merger remedies policy.

⁵ See Post Trial Brief of the United States, United States of America, Plaintiff, v. AT&T Inc., DirecTV Group Holdings, LLC, and Time Warner, Inc., Defendants, May 8, 2018, pp. 2, 3.

⁶ Although we use the example of a price increase as a competitive harm, mergers may provide incentives for other types of harm, such as degrading quality.

Structural remedies are generally self-enforcing because they focus on replicating (or moving toward) pre-merger incentives and rely on market forces. As an example of how a structural remedy works, consider a horizontal merger between two firms that manufacture differentiated products that raises competitive concerns. If the products of the two firms are close competitors, then neither firm has an incentive to raise prices pre-merger, in part because it would expect to lose a significant amount of sales to the competing firm. Post-merger, however, a significant amount of that diversion is internalized within the merged firm and thus may provide the unilateral incentive to raise price.

How can this undesirable outcome be eliminated by a remedy? A remedy that divests one of the competing products to an independent buyer counteracts the post-merger economic incentive of the merged firm to raise the post-merger price on the other product because there is no longer internalization of diversion. To be effective, such a divestiture relies on the independent buyer to "step into the shoes" of the divesting firm and act on its incentives to maximize its own profit. Because it relies on firms' desires to maximize their profits, a divestiture remedy is self-enforcing and does not require ongoing monitoring.

In theory, an alternative behavioral remedy could be crafted that could allow the merged firm to continue to sell both competing products but commit to not raising prices. As discussed, such a remedy does not alter the merged firm's profit-maximizing incentives; rather, it seeks to prevent the merged firm from acting on those incentives in ways that could harm competition.⁸ Such a remedy is unlikely to be attractive to antitrust enforcers, however, because it would require ongoing monitoring by the enforcement agency, which would generally be costly and difficult.⁹ A commitment never to raise prices would not be sustainable as there are legitimate reasons to raise prices even in the absence of the merger, such as increased costs, increased demand or quality improvements. Not only would it be difficult for the enforcement agencies to assess whether a proposed price increase is justified, but the merged firm would object to the loss of flexibility to react to competitive pressures if pre-approval of price changes were required. Such a behavioral remedy is thus unlikely to be practical or acceptable and, in fact, may be harmful to competition by preventing the merged firm from responding to marketplace forces.

In other cases, however, the agencies have accepted non-self-enforcing remedies. Antitrust enforcers may be willing to accept commitments from firms not to engage in anticompetitive behavior if the terms of such commitments are readily (and cheaply) monitored, there is a punishment mechanism for violating them, and a self-enforcing remedy is not feasible or there is some benefit from not requiring a self-enforcing remedy. We next discuss the *Ticketmaster/Live Nation* merger, its remedy and the issues that have been raised with regard to the enforcement of certain aspects of the remedy.

III. OVERVIEW OF THE TICKETMASTER/LIVE NATION MERGER

Ticketmaster and Live Nation announced their plan to merge in February 2009. At the time of the proposed merger, Ticketmaster was the largest primary ticketing company in the U.S. with gross revenues of \$800 million in 2008. Ticketmaster provided primary ticketing services to more than 80 percent of the major concert venues in the U.S. in 2008. Ticketmaster had also recently expanded into artist management following its acquisition of Front Line Management Group. Page 12.

Live Nation was the largest U.S. concert promoter in 2008, with \$1.3 billion in revenue from its promotions business, and had promoted shows representing one third of concert revenues at the major U.S. concert venues at the time.¹³ In addition to entering long-term partnerships with several popular artists, such as Madonna, to exclusively promote their concerts, sell their music recordings and market their merchandise, Live Nation owned or operated roughly 70 major concert venues and had recently entered the marketplace for primary ticketing services.¹⁴

12 Ibid.

13 *Ibid*.

14 Ibid. at pp. 4-5.

⁷ See, e.g. J. Kwoka, "Merger Remedies: An Incentives/Constraints Framework," *The Antitrust Bulletin*, Vol 62(2), 2017, p. 369; J. Kwoka & D. Moss, "Behavioral Merger Remedies: Evaluation and Implications for Antitrust Enforcement," The American Antitrust Institute, 2012, pp. 5, 6.

⁸ See, J. Kwoka, "Merger Remedies: An Incentives/Constraints Framework," The Antitrust Bulletin, Vol 62(2), 2017, p. 369.

⁹ The merging firms may also object to such a remedy because of onerous monitoring requirements and the restriction on the firm's flexibility in setting its prices and responding to market conditions.

¹⁰ Competitive Impact Statement filed on Jan. 25, 2010 regarding merger of Ticketmaster and Live Nation at pp. 3,4 (hereinafter, "*Ticketmaster/Live Nation CIS*"). Primary ticketing firms provide services such as websites that help facilitate the initial sale of tickets to concertgoing customers

¹¹ Ticketmaster/Live Nation CIS at p. 4. The CIS defined "major concert venues" as the 500 U.S. venues generating the most concert revenues in 2008 per Pollstar.

The DOJ expressed horizontal and vertical concerns about the competitive effects of the proposed transaction. In particular, the DOJ noted Ticketmaster's high market share of primary ticketing services and that its high profit margins persisted due to high barriers to entry. The DOJ also highlighted that Live Nation was a major threat to Ticketmaster because it could obtain sufficient scale to compete by ticketing its own venues and had a competitive advantage by being able to bundle access to concerts with its ticketing service. By early 2009, according to the DOJ, Live Nation was the primary ticket service provider to more than 15 percent of the capacity at major U.S. concert venues. Among its competitive responses to the threat of Live Nation, the DOJ alleged that Ticketmaster attempted to eliminate Live Nation as a competitor by agreeing to acquire it less than two months after it began offering primary ticketing services. The DOJ also stated that the transaction would diminish innovation and would result in even higher barriers to entry in primary ticketing services.

The DOJ also had concerns related to potential anticompetitive practices that might be possible or more likely to occur from being vertically integrated. One potential mechanism of competitive harm would be for Ticketmaster to exploit its dominance in primary ticketing services to encourage customers to use Live Nation's non-ticketing services businesses. ¹⁶ Another potential anticompetitive tactic, for example, would be for a venue that preferred Live Nation for concert promotion or artist management to be told that such services would be more available if the venue also used its Ticketmaster ticketing services. The substantial presence of the merged firm at all stages of the business suggested significantly enhanced opportunities to retaliate against those who might desire to part ways from the merged firm at any single stage. Highlighting that these vertical concerns were not just theoretical, Anschutz Entertainment Group ("AEG"), the second largest U.S. promoter, a venue operator, and Ticketmaster's second largest customer at the time, began seeking an alternative to Ticketmaster right after the merger with Live Nation was announced. AEG was apparently concerned about working with and disclosing information to a company that might become a direct competitor.¹⁷

The merging parties argued that the vertical integration of their complementary businesses would decrease the number of industry participants who would need to be compensated for the production of a concert and therefore would allow the merged company to reduce the prices paid by venues for primary ticketing services and by the ultimate customer, concertgoers, for tickets. The merging parties' efficiency claims were not fully credited according to the DOJ, because many of the efficiencies could be achieved absent the merger: "Ticketmaster and Live Nation each already had expanded vertically before they agreed to the proposed transaction, and but for the proposed transaction, venues and concertgoers would have continued to enjoy the benefits of competition between two vertically integrated competitors." 18

IV. ORIGINAL CONSENT DECREE

The original consent decree in early 2010 between the merging parties and the DOJ involved a settlement agreement with self-enforcing (structural), non-self-enforcing (behavioral), and monitoring components. According to the prepared remarks of the Assistant Attorney General of the Antitrust Division of the DOJ, the two structural remedies required: (1) "Ticketmaster to license its ticketing platform to AEG, another major promoter and owner of some of the country's most significant venues"; and (2) "Ticketmaster to divest to Comcast-Spectacor its Paciolan line of business." Paciolan, a venue-managed platform, allows venues to host primary ticket services on their own websites and therefore would create venue-ticketing integration as an alternative business model to promoter-ticketing integration per the AEG licensing agreement. This aspect of the consent decree was purported to "preserve not only competition within a business model — namely, integrated live music production firms — but also among different models."

The behavioral remedies were aimed at preventing the merged company from engaging in various types of anticompetitive conduct. First, Ticketmaster and Live Nation were prohibited from retaliating against any venue that "considers or works with another primary ticketing service." Second, the merging firms were prohibited from developing mandatory bundles of their services (requiring that a customer accept Live

¹⁵ Ibid. at pp. 8-12.

¹⁶ The potential mechanisms of economic harm are as described by John Kwoka. See Kwoka, Jr., J.E., "Rockonomics: The *Ticketmaster-Live Nation Merger* and the Rock Concert Business (2010)," Case 8 in *The Antitrust Revolution*, Economics, Competition, and Policy, 7th ed., 2019 at pp. 177-178.

¹⁷ Ibid.

¹⁸ Ticketmaster/Live Nation CIS at p. 12.

^{19 &}quot;The Ticketmaster/Live Nation Merger Review and Consent Decree in Perspective," prepared remarks by Christine A. Varney (Assistant Attorney General, Antitrust Division, U.S. Dept. of Justice) for South by Southwest, March 18, 2010 at p. 10.

²⁰ Ibid. at pp. 10-11.

²¹ Ibid. at p. 11.

²² Ibid. at p. 13.

Nation as a promoter in order to use Ticketmaster's primary ticketing services or vice versa). And third, there were provisions aimed at preventing anticompetitive abuse of Ticketmaster's unique ticketing data.²³ Regarding monitoring safeguards, the settlement agreement stipulated ongoing oversight for a 10-year period, including special provisions to facilitate such oversight and an enhanced obligation to report future mergers.²⁴

V. ORIGINAL CONSENT DECREE MODIFIED AND EXTENDED IN EARLY 2020

The original consent decree prohibited the combined company from "retaliating against concert venues for using another ticketing company, threatening concert venues, or undertaking other specified actions against concert venues for ten years." The DOJ received complaints that Live Nation used its control over concert tours to pressure venues into using Ticketmaster for ticketing. For example, AEG had told DOJ officials that venues it managed in Atlanta, Las Vegas, and several other cities were informed that they would lose shows if Ticketmaster were not used. According to the DOJ, Live Nation "repeatedly engaged in conduct that . . . violated the Final Judgment."

In apparently the most significant action related to an existing antitrust consent decree in twenty years, in late January 2020, the DOJ extended the *Live Nation/Ticketmaster* consent decree by five and a half years and modified the behavioral commitments.²⁷ The DOJ and the combined firm (Live Nation) agreed to modifications to clarify that: (a) Live Nation may not threaten to withhold concerts if a venue selects a ticketer besides Ticketmaster; (b) a Live Nation threat to withhold concerts because a venue selects another ticketer is a violation; and (c) withholding concerts in response to a venue selecting a ticketer besides Ticketmaster is also a violation.²⁸ The DOJ will also appoint an independent monitor to investigate and report on the firm's compliance with the revised Final Judgment, and Live Nation will be subject to an automatic \$1 million penalty for each new violation.²⁹

VI. LESSONS FROM THE *LIVE NATION/TICKMASTER* CONSENT DECREE

The modification and five-and-a-half-year extension of the original consent decree in the *Live Nation/Ticketmaster* transaction underscores the potential pitfalls of non-self-enforcing remedies. Although such remedies allow for some degree of flexibility and customization in complex situations where structural remedies may not be feasible nor appropriate, there are substantial potential shortcomings and, in general, they warrant careful scrutiny. As highlighted above, antitrust enforcers' willingness to accept behavioral commitments from firms should be informed by the ease and cost of monitoring their conduct, the effectiveness of a punishment mechanism for violations, and the extent to which a self-enforcing remedy is infeasible or less preferred. The modification of the original consent decree in *Live Nation/Ticketmaster* is an attempt to clarify what constitutes a violation, as well as strengthen the monitoring and penalty mechanisms.

The fact that the behavioral commitments in *Live Nation/Ticketmaster* required modification and extension (and was the most significant action related to an antitrust consent decree in twenty years) indicates that at least some facets of the non-self-enforcing remedies agreed to by the merging parties and DOJ in 2010 did not work as anticipated. As discussed above, Live Nation apparently threatened holding back concerts from venues if the venues did not use its Ticketmaster ticketing services. This result is not altogether surprising—the behavioral remedies lacked a self-enforcing mechanism, and Live Nation was arguably being asked to behave contrary to its incentives to at least some extent. Without a self-enforcing mechanism, the success of a behavioral remedy depends largely on workable and effective monitoring and punishment. Only time will tell whether the revamped behavioral remedies regarding the *Live Nation/Ticketmaster* merger will create an effective deterrent and allow for easier detection and enforcement should violations occur in the future.

23 Ibid.

24 *Ibid.* at pp. 13-14.

25 "Justice Department Will Move to Significantly Modify and Extend Consent Decree with Live Nation/Ticketmaster," Dept. of Justice, Office of Public Affairs, Dec. 19, 2019.

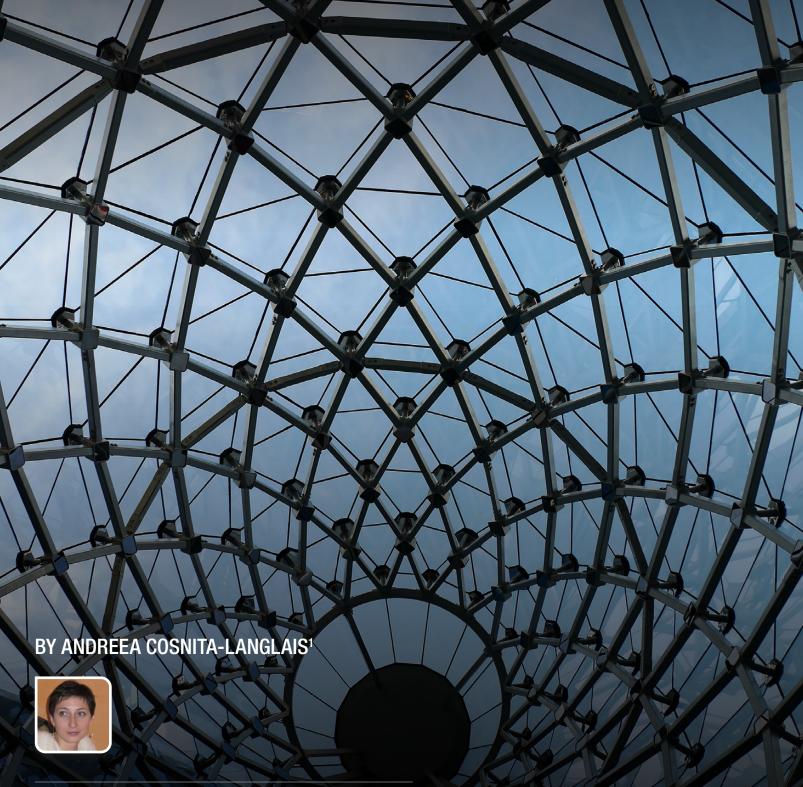
26 Aswad, J., "Department of Justice 'Looking into Accusations' Against Live Nation, Report Claims," Variety, April 1, 2018.

27 "Justice Department Will Move to Significantly Modify and Extend Consent Decree with Live Nation/Ticketmaster," Dept. of Justice, Office of Public Affairs, Dec. 19, 2019 and "Court Enters Judgment That Significantly Modifies and Extends Consent Decree with Live Nation/Ticketmaster," Dept. of Justice, Office of Public Affairs, January 28, 2020.

28 "Justice Department Will Move to Significantly Modify and Extend Consent Decree with Live Nation/Ticketmaster," Dept. of Justice, Office of Public Affairs, Dec. 19, 2019.

29 *Ibid*.

REMEDIES: STRUCTURAL, BEHAVIORAL, BOTH, OR NONE? ENFORCEMENT TRADE-OFFS FOR MERGERS AND ANTITRUST



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I. INTRODUCTION

Remedies, broadly defined as measures used to restore competition by removing a competitive concern or putting an end to an infringement, are yet again topical.

2019 was a busy year from this point of view: there were calls in the U.S. to break up the Big Tech companies and fix competition by imposing spin off remedies,² while in Europe the ECN+ Directive granted Member State competition authorities the same power that the European Commission has held since Council Regulation 1/2003 to impose commitments, i.e. structural or behavioral remedies as an alternative to penalties, in order to quickly restore effective competition and ensure the proper functioning of the European internal market.³

On the enforcement side, the U.S. Department of Justice gave up its more favorable view of conduct remedies for mergers as promoted by the 2011 Remedies Guide, and decided to switch to its previous version focusing on divestitures,⁴ while the new chairman of the Federal Trade Commission intends to limit the use of remedies in general.⁵ By contrast, the French Inspectorate-General for Finance recommended, in a recent report on European competition policy, that the European Commission's recourse to behavioral remedies be facilitated, or that they be at least placed on an equal footing with structural remedies.⁶

In an attempt to understand regulators' evolving stance on remedy enforcement, this paper briefly reviews the rationale behind both structural and behavioral fixes, not only in merger but also in antitrust cases. Rather than provide definite answers, this discussion will raise some questions.

II. MERGER REMEDIES: TOO MUCH OF A GOOD THING?

Despite recurrent doubts as to their effectiveness, remedies are frequently used to solve competitive concerns raised by mergers.⁷ All merger remedies are meant to preserve competition on the market(s) affected by the proposed transaction, and in so doing they help prevent potential anticompetitive conduct post-merger. The type of remedy used will, however, depend on the type of merger, and also on the agency dealing with the case.⁸

Basically, structural remedies⁹ address competitive concerns arising from the change in the structure of the market or of the value chain. They typically enable the entry of a new competitor or the strengthening of an existing player by transferring property rights. By contrast, behavioral remedies¹⁰ are supposed to (temporarily) limit the property rights and hence conduct of the merging firms, so as to allow competitors, customers and suppliers to react to the structural modification of the market or of the value chain triggered by the merger. Hence, agencies tend

- $2 See \ https://www.vox.com/policy-and-politics/2019/3/8/18256192/elizabeth-warren-medium-google-amazon-facebook \ or \ https://www.nytimes.com/2019/05/09/opinion/sunday/chris-hughes-facebook-zuckerberg.html for instance.\\$
- 3 Directive (EU) 2019/1 of the European Parliament and of the European Council of 11 December 2018.
- 4 Makin Delrahim, 'Modernizing the Merger Review Process', Remarks at the Global Antitrust Forum, September 2018.
- 5 Joseph Simons, "Completed Initial Questionnaire," Senate Commerce Committee, February 2018.
- 6 French Inspectorate-General for Finance (Inspection générale des finances), La politique de la concurrence et les intérêts stratégiques de l'UE [Competition policy and the strategic interests of the EU], April 2019.
- 7 In the U.S., on average two merger cases get litigated out of the roughly 50 investigations every year Kwoka, John E. (2018) Reviving Merger Control: A Comprehensive Plan for Reforming Policy and Practice, available at SSRN: https://ssrn.com/abstract=3332641. In the EU, only 30 mergers have been banned by the European Commission as of February 2020 since the coming into force of the EU Merger Regulation in 1990 https://ec.europa.eu/competition/mergers/statistics.pdf.
- 8 Among national competition authorities in Europe, the German Bundeskartellamt has not cleared any merger conditional on behavioral remedies since 2011, whereas the French Competition Agency made 22 such decisions; out of all merger remedies, the French agency uses behavioral measures in 36 percent of cases, whereas the Commission does so in less than 20 percent of cases see Autorité de la concurrence. *Les engagements comportementaux Behavioral remedies*, La documentation française, February 25, 2020, at https://www.autoritedelaconcurrence.fr/sites/default/files/2020-01/eng_comportementaux_final_en.pdf.
- 9 These can take the form of mandatory sales (of tangible assets such as subsidiaries, stores, plants, warehouses, branches, or intangible assets such as brands and operating licenses), termination of franchise agreements, non-acquisition of an asset initially included in the scope of the deal, severing ties with a competitor, or the divestiture of minority shareholdings.
- 10 For instance, licensing a brand to a competitor, providing access to a key, possibly essential infrastructure (network good or service, technology, patent, intellectual property rights), temporarily changing contractual clauses, prohibition of bundling services or products or of product range discounts, giving up certain customers, or preventing the passing of information between structures by putting up "vertical firewalls."

to prefer structural measures for horizontal mergers, and behavioral restrictions for vertical ones. 11

Divestitures are most often used to solve horizontal concerns due to overlaps between merging parties. ¹² They may not always be feasible in the case of vertical mergers, because they can endanger the very efficiency gains expected from the deal, i.e. those arising from the elimination of double marginalization. But that does not mean that conduct remedies will necessarily perform better. To implement behavioral remedies, the agency should list all possible circumstances relevant to the potential conduct raising competitive concerns, which generates informational problems for the design of conduct remedies. The agency must also engage in regulatory-like oversight to ensure compliance, because merging firms have incentives to evade behavioral constraints.

Although structural remedies are viewed as more drastic, because they are irreversible, they are also generally less costly to enforce, because they can normally be executed more quickly, and do not require continuous monitoring over long periods of time once they have in fact been implemented (unlike conduct remedies). However, they can easily fail too. If the buyer of divested assets is a new entrant, this firm may lack the necessary information and experience to manage to stay in the market long enough to effectively compete against the insiders and drive prices down. And if the buyer of divested assets is an outsider, this firm has every incentive to maximize the anticompetitive effect of the merger. In fact, the buyer and the sellers of divested assets for a horizontal merger have a common interest to limit competition between them, which goes against the agency's objective in imposing a fix for the horizontal overlaps created by the merger. Furthermore, the new industry structure resulting from the asset transfer may be (even more) conducive to collusion, due to more symmetric asset distribution or the creation of multimarket contacts.

All in all, it shouldn't come as a surprise that the few existing studies on the effectiveness of merger remedies have concluded that they often fail to restore and preserve competition. ¹⁵ And given that merger prohibitions are rare, one cannot but wonder whether merger remedies may actually be used much too often.

To answer this question, one should examine the opportunity to enforce merger remedies. It turns out few papers do so, but they all point to the possibility of lowering welfare when clearing mergers conditional on remedies. This basically suggests that the current trend in merger enforcement — to clear as many mergers as possible, with or without remedies — is consistent with the belief that type I errors, i.e. wrongful prohibitions, are much more costly than type II errors, i.e. wrongful clearances. More research is needed to clarify whether this might — or might not — be true.

¹¹ Behavioral remedies must ensure a level playing field for competitors that need to either buy or use key assets, inputs or technologies owned by the merging firms, which usually happens when the merged entity is vertically integrated and there's a risk of foreclosing the access to the upstream or downstream markets to existing or potential competitors.

¹² However, conduct remedies can equally fix horizontal effects in certain cases. The 2020 report on behavioral remedies by the French competition authority (see footnote 8 above) provides examples of mergers in the regional daily press sector, for which behavioral commitments in the shape of "Chinese walls" were used (i.e. provisions guaranteeing the separation of the operational, administrative and managerial activities of the two entities belonging to the same group) in order to fix the risk of horizontal effects in terms of content homogenization and ensuing quality and diversity loss for readers.

¹³ See Farrell, Joseph (2003) Negotiation and Merger Remedies: Some Problems, in François Lévêque & Howard Shelanski, eds. Merger Remedies in American and European Union Competition Law. Cheltenham UK: Edward Elgar.

¹⁴ See Compte, Olivier, Jenny, Frédéric & Rey, Patrick (2002) Capacity Constraints, Mergers and Collusion. European Economic Review 46, or Vasconcelos, Helder (2005) Tacit Collusion, Cost Asymmetries, and Mergers. Rand Journal of Economics 36.

¹⁵ There are currently three such studies: two commissioned by the Federal Trade Commission in 1999 (at https://www.ftc.gov/sites/default/files/documents/reports/study-commissions-divestiture_process/divestiture_0.pdf) and 2017 (at https://www.ftc.gov/system/files/documents/reports/ftcs-merger-remedies-2006-2012-report-bureaus-competition-economics/p143100_ftc_merger_remedies_2006-2012.pdf) respectively, and one by the European Commission, DG Comp, in 2005 (at https://ec.europa.eu/competition/mergers/legislation/remedies_study.pdf). Looking at merger remedies in the U.S., Kwoka (2015) finds that mergers cleared with asset divestitures raised prices by 5.6 percent, and those with behavioral remedies by more than 13 percent on average — see Kwoka, John (2015) Mergers, Merger Control and Remedies: A Retrospective Analysis of U.S. Policy, MIT Press.

¹⁶ For instance, an asset sale to a new entrant might prevent this firm from opening its own brand — see Cabral, Louis (2003) Horizontal Mergers with Free-Entry: Why Cost Efficiency May Be a Weak Defense and Asset Sales a Poor Remedy, International Journal of Industrial Organization 21(5). But asset reallocation to outsiders already on the market can also lower consumer welfare if the merger does not generate sufficiently synergies — see Vergé, Thibaud (2010) Horizontal Mergers, Structural Remedies and Consumer Welfare in a Cournot Oligopoly with Assets, The Journal of Industrial Economics 58(4). Merger remedies may equally hinder the deterrence of the most welfare-detrimental mergers, which may then force the competition authority to investigate mergers more often — see Cosnita-Langlais, Andreea & Sørgard, Lars (2018) Enforcement and Deterrence in Merger Control: The Case of Merger Remedies, Review of Law and Economics 14(3).

III. REMEDIES IN ANTITRUST CASES: STRUCTURAL (IN)CONSISTENCY?

Antitrust violations are typically punished by fines. These are easy to execute, but will fail to restore competition on the market in the absence of injunctions to cease the violation, and may even provide incentives to increase profits through further unlawful conduct. Hence effective antitrust enforcement relies heavily on antitrust remedies. Contrary to merger remedies, which need to fix the likely anticompetitive effects of the deal beforehand, antitrust remedies must stop the specific abusive conduct undertaken by firms to restore competition on the market.

In principle, both types of remedies can achieve this, but, in reality, structural relief for antitrust violations is rare. Out of more than 400 proceedings initiated by the U.S. Department of Justice under Section 2 of the Sherman Act and surveyed in 2004,¹⁷ some 22 percent involved structural remedies. In Europe, the adoption of structural remedies for abuses of a dominant position has only been possible since 2003, once antitrust remedies were formally introduced into EU law in 2003.¹⁸ The European Commission has hardly ever used structural antitrust remedies, and then only as of 2008.¹⁹

A general reason for favoring structural over behavioral remedies in antitrust stems from the practical difficulty of splitting up an integrated firm, which operates effectively as a single entity, without provoking efficiency losses. It is far from obvious how to do that to a firm that has expanded through internal growth, or at least more complex than divesting assets from an entity resulting from external growth.

Often, putting an end to abusive unilateral behavior does not require drastic remedies, and an injunction to stop may suffice. ²⁰ The remaining question is whether that is enough to curb the anticompetitive behavior in order to preserve competition, especially when the incentives for the antitrust violation stem from the structure of the relevant market. In merger cases, it is the future market structure that is likely to trigger anticompetitive behavior, and competition authorities do not hesitate to enforce divestitures in order to limit this risk. In antitrust cases, agencies are not quite ready to do the same, although the anticompetitive conduct is not potential, but has already materialized. ²¹ Thus, a dominant firm may keep all its business and assets even after an antitrust violation, but a merger generating some efficiency gains while increasing or strengthening a dominant position will not benefit from the same opportunity. ²²

Arguably, some competition agencies do acknowledge the possibility that structural relief can be appropriate to address the lack of effective competition on the market.²³ The expectation that in unilateral abuse cases the buyer of divested assets is more likely to put them to profitable use and compete more fiercely is probably related to the absence of a problem typically associated with divestitures for horizontal mergers – namely that the buyer – and merger-outsider – is not an ally of competition, but instead will gain from maximizing the merger's anticompetitive effect.

Finally, most antitrust remedies, regardless of their nature, are the result of a negotiated settlement between the agency and the firm: the former forgoes a formal infringement decision to obtain a quicker fix for its concerns, while the latter avoids the sanction and gets a reduced

¹⁷ See Crandall, Robert W. & Elzinga, Kenneth G. (2004) Injunctive Relief in Sherman Act Monopolization Cases. Kirkwood, J. (Ed.) *Antitrust Law and Economics* (Research in Law and Economics, Vol. 21), Emerald Group Publishing Limited, Bingley.

¹⁸ Council Regulation (EC) No. 1/2003 on the implementation of the rules on competition laid down in Arts 81 and 82 of the Treaty, OJ L 1, 4 Jan. 2003.

¹⁹ Actually, this has only concerned the European energy and gas market so far, and upon proposition of remedies by the firms themselves - see Case COMP/39.388, *German Electricity Wholesale Market* and COMP/39.389, *German Electricity Balancing Market* (26 Nov. 2008), OJ 2009/ C 36/8, Case COMP/39.402, RWE *Gas Foreclosure* (18 Mar. 2009), OJ 2009/C 133/10, and Case COMP/39.315, *ENI*, OJ 2010/C 352/09.

²⁰ Actually, in the EU, structural remedies can only be adopted in antitrust cases as a last resort, i.e. provided no equally effective behavioral remedy is available, or if such a solution were more burdensome than the structural remedy considered.

²¹ In European antitrust this reluctance to target a firm's dominant position in order to contain its anticompetitive behavior is most likely related to the fact that it's not the dominant position in itself that is prohibited, but only its abuse. For instance, the French competition agency has never accepted structural remedies for unilateral anticompetitive conduct, explicitly arguing every time that the competitive concern addressed did not stem from the market structure (i.e. dominant position), but from the firm's deviant conduct - see Autorité de la concurrence. Les engagements comportementaux - Behavioral remedies, La documentation française, February 25, 2020, at https://www.autoritedela-concurrence.fr/sites/default/files/2020-01/eng_comportementaux_final_en.pdf.

²² Wang, Wei (2011) Structural Remedies in EU Antitrust and Merger Control. World Competition 34(4).

²³ This is the case in UK, where the CMA has the power to initiate a market inquiry resulting in divestitures if an 'adverse effect on competition' is found — see Competition and Markets Authority, Market Studies and Market Investigations: A Supplemental Guidance on the CMA's Approach (2014, rev. 2017). A similar provision exists in non-metropolitan French regions, where, since Lurel Act of 2012, the French Competition Agency can enforce 'structural injunctions' to tackle competition concerns raised by a dominant position on the final retail market — see Lurel V. (2013) Le retour de l'Etat régulateur en outre-mer. Concurrences, n° 2-2013.

fine.²⁴ Although both competition authorities and companies may prefer resolving a unilateral violation through negotiated commitments, concerns have been raised regarding the use of this solution as opposed to full-fledged infringement decisions. First, without the deterrent effect of the sanction, many fear the possible increase in the incentive for companies to engage in anticompetitive practices.²⁵ In addition, the case-by-case approach taken by agencies when negotiating antitrust remedies provides little guidance to parties trying to establish what types of behavior are lawful, given that commitments or consent decrees identify only conduct raising competitive concerns. To put it differently, formal prohibitions of unilateral abusive conduct will create legal precedent, and thus provide guidance for the assessment of future cases. This informational value of formal decisions to sanction anticompetitive practices needs to be factored in alongside with the deterrent effect they exert whenever the social cost and benefit of antitrust remedies is being assessed.²⁶

IV. CARTEL REMEDIES: A MISSED OPPORTUNITY IN ANTITRUST ENFORCEMENT?

Despite the increasing reliance on market screening to uncover them and monetary sanctions to punish them, it would be hard to argue that enough is being done against cartels. Current enforcement, even allowing for non-monetary sanctions and well-designed leniency programs, is still not deterrent enough.

So, why not contemplate additional instruments, such as structural remedies? Arguably, it would be a new tool in the agencies' arsenal.²⁷ But given that cartel cases are the epitome of anticompetitive conduct triggered by market structure, Harrington (2018)²⁸ makes a truly compelling case for the effectiveness of structural relief for collusion.

Contrary to merger cases, for which anticompetitive effects, in particular coordinated effects, will not have not materialized at the time of the *ex ante* enforcement decision, a proven cartel infringement reveals beyond doubt that the market is prone to collusion. Collusion could then start again, either in explicit or tacit form.²⁹ A change in the distribution of market shares through asset divestitures would address recidivism (by creating a maverick for instance) while also preventing tacit collusion (by making explicit communication and agreement necessary).

Fine tuning would be easier than in the case of merger remedies, as potentially all cartel members could be required to divest, and given that a cartel does not generate cost savings, there is no risk of writing them off. A mandatory asset transfer could even turn out to be a more effective deterrent than the (necessarily capped) fines, since, although akin to a monetary penalty for the firms, the liquidity constraint for the latter would be much less relevant. Finally, and to the extent that the resulting change in market structure will boost competition and thereby lead to lower industry prices, a structural remedy might even provide more extensive compensatory relief to buyers than "mere" damages (which are often available only to direct customers).

On the downside, structural remedies are certainly costlier to administer than monetary sanctions. And they may fail to correct the very problem they are supposed to address – making the market less prone to collusion – depending on the distribution of total industry capacity³¹ and the identity of the buyer (a new entrant? a maverick already on the market? other cartel members?)

²⁴ Since the application of the Council Regulation No 1/2003 making room for commitments, the European Commission has heavily relied on such decisions: more than 70 percent of the abuse-of-dominance cases were resolved with commitments – see Mariniello, M. (2014) "Commitments or prohibition? The EU antitrust dilemma." Bruegel Policy Brief 2014/01. The same trend is noted in the U.S., where over the last 30 years the FTC and DOJ have "resolved nearly their entire civil enforcement docket by consent decree" – see Wright, J. D. & Ginsburg, D. H. (2018) The economic analysis of antitrust consents. European Journal of Law and Economics 46. Currently, the negotiated settlement of antitrust investigations is common in both OECD and non-OECD countries - Secretariat, Organization for Economic Co-operation and Development, Commitment Decisions in Antitrust Cases (Mar. 30, 2016).

²⁵ Choné Philippe, Souam Saïd & Vialfont Arnold (2014) On the optimal use of commitment decisions under European competition law. International Review of Law and Economics 37.

²⁶ Cosnita-Langlais, Andreea & Tropeano, Jean-Philippe (2020) Litigation and the Informational Value of Precedent: An Application to Antitrust Commitments. Mimeo.

²⁷ A recent real-life example is nonetheless provided by the Brazilian competition agency, which convicted a cement cartel for price-fixing and market-sharing in 2014. In addition to corporate and individual fines, the authority imposed the divestiture of cement and concrete plants in order to reverse the structural market changes that the cartel had implemented to secure the stability of the agreement. See press release of CADE at http://en.cade.gov.br/press-releases/cade-fines-cement-cartel-in-blr-3-1-billion.

²⁸ Joseph E. Harington, Jr. (2018) A proposal for a structural remedy for illegal collusion, Antitrust Law Journal 82(1),

²⁹ See William E. Kovacic et al. (2007) Lessons for Competition Policy from the Vitamins Cartel, in *The Political Economy of Antitrust* 149, Vivek Ghosal & Johan Stennek eds.

³⁰ Joseph E. Harrington, Jr. (2017) The deterrence of collusion by a structural remedy. Economics Letters 160.

³¹ See footnote 14 above.

Notwithstanding these drawbacks, asset divestitures wouldn't make things worse for cartel enforcement, and Harrington (2018) rightfully stresses that the benefits of adding this instrument on top of the others would be highest when fines are relatively low, civil claims for damages are hard to bring, and non-monetary sanctions are unavailable.

V. SOME FINAL REMARKS

All in all, this note argues that the cost-benefit analysis of the enforcement of remedies will depend – a lot – on the particular case, and therefore general presumptions on the relevance of one or another type of remedy and even on their appropriateness might easily be misguided.

For instance, it might be worth reconsidering the extensive recourse to remedies for both mergers and unilateral anticompetitive conduct cases. In contrast, one might wonder why, so long as the incriminated behavior clearly stems from a faulty market structure, mandatory asset sales are never used against cartels?

In the end, this calls for a consistent theory of competitive relief, in order to properly frame the enforcement of remedies. For the time being we have plenty of theories of harm, but a sound theory of how to remedy harm would come in handy.

STRUCTURAL vs. BEHAVIORAL REMEDIES



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I. INTRODUCTION

Both antitrust and merger investigations at the EU level regularly conclude with the European Commission ("Commission") accepting commitments or, in antitrust cases, imposing remedies.

In antitrust investigations, Article 9 of Regulation 1/2003² ("Article 9") provides that the Commission can render commitments binding. In addition, Article 7 of Regulation 1/2003 ("Article 7") endows the Commission with power to impose remedies to bring an infringement of Articles 101 or 102 of the Treaty on the Functioning of the European Union³ ("TFEU") effectively to an end.⁴

In the merger control context, the Commission can accept commitments modifying a notified concentration and enabling the Commission to declare the concentration compatible with the internal market and the EEA Agreement pursuant to Articles 6(2) and 8(2) of the Merger Regulation.⁵

"Remedies" are therefore understood not only to include modifications to notified concentrations but also measures intended to bring an infringement of Article 101 or 102 to an end, or to meet concerns regarding such an infringement and remove grounds for action by the Commission.

The purpose of remedies is either to reduce or eliminate the ability or incentives of the undertakings concerned to follow a conduct that would impede or even eliminate effective competition, or, in particular, also to increase the ability of third parties to compete.

The theories of harm underlying antitrust and merger investigations are often similar if not identical; the difference being that antitrust investigations are typically concerned with actual (or at least alleged) infringements of competition law, whereas merger investigations consider potential harm to competition in the future.⁶

Despite these similarities for at least a subset of cases, the measures applied to remedy concerns in these two areas of competition law vary substantially. The predominance of behavioral remedies in antitrust cases stands in contrast to structural remedies mostly relied upon in merger investigations. This is surprising and begs the question of the consistency of the analytical framework used and the factors driving the Commission's remedies practice.

II. BACKGROUND

A. Requirements

The Merger Regulation notes the requirement that commitments accepted by the Commission "should be proportionate to the competition problem and entirely eliminate it." Similarly, Article 7 empowers the Commission "to impose any behavioural or structural remedies which are proportionate to the infringement committed and necessary to bring the infringement effectively to an end."

Remedies therefore must meet the following two requirements:

- The remedies must be <u>effective</u> in removing the competition concerns and restore or maintain competition without the need for a (merger) prohibition decision or an infringement decision under Article 7.
- The remedies must be proportionate to the competition concerns identified.
- 2 Council Regulation (EC) No 1/2003 of December 16, 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1/1 (4 January 2003) ("Regulation 1/2003").
- 3 Consolidated Version of the Treaty on the Functioning of the European Union [2010] OJ C 83/47.
- 4 See Lowe & Maier-Rigaud (2008) for an overview on antitrust remedies. Lowe, P., & Maier-Rigaud, F. (2008). Quo Vadis Antitrust Remedies. In B. Hawk (ed), *International Antitrust Law & Policy: Fordham Competition Law 2007* (pp. chapter 20, 597–611). Fordham University School of Law.
- 5 Council Regulation (EC) No. 139/2004 of January 20, 2004 on the control of concentrations between undertakings (OJ L024, 29/1/2004) ("Merger Regulation").
- 6 See for example Maier-Rigaud, F. P., & Tosini, N. (2019), Mergers between Backward Integrated Firms: Insights from BASF/Solvay's Polyamide Business. *Journal of European Competition Law & Practice*, forthcoming, for a vertical theory of harm that could arise not only in a merger setting.
- 7 See Merger Regulation, paragraph 30.



The legal hurdles for imposing structural remedies under Article 7 continue, however, to be considered to be higher than those for behavioural remedies. At least this is what a cursory look at Article 7(1)3 would suggest. Moreover, according to recital 12 of Regulation 1/2003, the imposition of a structural remedy "would only be proportionate where there is a substantial risk of a lasting or repeated infringement that derives from the very structure of the undertaking." Reformulating the relevant sections of Article 7(1)3 while preserving their meaning, that is, ensuring the logical consistency between the original and the reformulated sentence, however, reveals that the subsidiarity of structural remedies is merely an impression based on the convoluted wording chosen. A logically equivalent, i.e. content preserving reformulation of Article 7(1)3 is as follows:

Behavioral remedies can only be imposed either where there is no more effective structural remedy or where any equally effective structural remedy would be equally or more burdensome for the undertaking concerned than the behavioral remedy.⁸

B. Types of Remedies

As indicated by Regulation 1/2003,⁹ the broadest classification for remedies distinguishes between structural and behavioral remedies.

Structural remedies seek to directly influence the competitive structure of the relevant market(s) in order to maintain or improve the conditions for competition. Behavioral remedies seek to address the identified competition concerns by requiring certain conduct from the undertakings concerned, which can of course include the requirement to refrain from certain actions.

Access remedies, which will also be introduced in more detail below, are another type of remedy often accepted in the past that has both structural and behavioral aspects. Despite various efforts to clearly distinguish between types of remedies, ¹⁰ the distinction is not always clear cut in practice.

1. Structural Remedies

A generally accepted definition of "structural remedies" does not exist.¹¹ The divestiture of a business to a suitable purchaser is a very common structural remedy in conditional merger clearance decisions by the Commission. While stating that other types of commitments may also be acceptable, the Commission has declared its clear preference for structural remedies in merger cases,¹² and, as shown below, this preference is also evidenced by the Commission's practice.

The reason for this preference lies, on the one hand, in the perceived capability of structural remedies to durably prevent the competition concerns raised by the notified merger by changing the incentives of the firm(s) in the market. On the other hand, structural remedies have the advantage that they do not require ongoing monitoring over the medium or long term.

The removal of links with competitors is another type of structural remedy. This can for example include commitments to exit from a joint venture or to sell a minority shareholding in a competitor.



⁸ See Maier-Rigaud (2012) and Maier-Rigaud (2016), which include not only a proposed test to choose remedies, but also a treatment of the likely intent of the European Commission as traced back to the initial proposals for Regulation 1/2003. Maier-Rigaud, F. P. (2012). The Idea of the Subsidiarity of Structural Remedies in European Competition Law (Zur Idee Der Subsidiarität Struktureller Maßnahmen Im Europäischen Wettbewerbsrecht). Wirtschaft und Wettbewerb, 5, 485-500. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1906335. Maier-Rigaud, F. P. (2016). Behavioral versus Structural Remedies in EU Competition Law. In P. Lowe, M. Marquis, & G. Monti (eds.), European Competition Law Annual 2013, Effective and Legitimate Enforcement of Competition Law (pp. chapter 7, 207-224). Hart Publishing. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2457594.

⁹ See Regulation 1/2003, preamble recital 12 and Article 7.

¹⁰ See for example the Merger Remedies Notice, the International Competition Network. (2016). *Merger Remedies Guide*. Retrieved from https://www.internationalcompetitionnetwork.org/portfolio/merger-remedies-guide, or Motta, M., Polo, M., & Vasconcelos, H. (2007). Merger remedies in the European Union: An overview. *The Antitrust Bulletin*, Vol. 52, Nos 3 & 4, 603-631.

¹¹ For an overview of the discussion of the definition of structural versus behavioral remedies see Maier-Rigaud, F. P. (2016). Behavioural versus Structural Remedies in EU Competition Law. In P. Lowe, M. Marquis, & G. Monti (eds.), *European Competition Law Annual 2013, Effective and Legitimate Enforcement of Competition Law* (pp. chapter 7, 207-224). Hart Publishing. Retrieved from https://papers.csrn.com/sol3/papers.cfm?abstract_id=2457594.

¹² See Merger Remedies Notice, paragraphs 15 and 17.

2. Behavioral Remedies

Behavioral remedies are designed to regulate the ongoing conduct of the undertakings concerned and can come in very different forms. In anti-trust cases, behavioral remedies are often designed to mirror the abuse: for example, a refusal to supply would be remedied with a commitment to supply or anticompetitive tying would be addressed with a commitment to untie.¹³

Behavioral remedies can be "positive" in the sense that they require a certain conduct or "negative" in the sense that they prohibit certain conduct. Examples of behavioral remedies that have been accepted in the past include:

- amending corporate governance provisions;14
- refraining from limiting capacity of certain infrastructure available to competitors; 15
- making investments into gas interconnection capacity; 16
- enabling customers to switch;¹⁷
- introducing a new pricing system;¹⁸
- capping of prices;¹⁹ and
- ring-fencing of strategic information within a consortium.²⁰

Under Article 7, the Commission can also order the addressees of the decision to cease and desist the conduct infringing Articles 101 or 102. Such an order can also be viewed as a behavioral remedy.

In the context of merger investigations, behavioral remedies are rarely favored. The Commission states in the Merger Remedies Notice that "[c]ommitments relating to the future behaviour of the merged entity may be acceptable only exceptionally in very specific circumstances."²¹ The main reason for this is that their effectiveness is sometimes questioned because, in contrast to structural remedies, they leave the firms' incentives essentially unchanged.²² In addition, there may be risks regarding the workability of behavioral remedies as an effective implementation and monitoring may be difficult to ensure, and risks regarding distorting effects on competition.²³

Designing behavioral remedies that are effective and do not entail the risks noted above over the typically long periods during which they are in effect is very challenging. Especially in fast-moving industries, changing circumstances that could not have been foreseen can mean that behavioral remedies become less effective or even irrelevant, or more difficult to monitor.²⁴ Moreover, the remedies can have the consequence of

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13 See Hellström, P., Maier-Rigaud, F., & Bulst, F. W. (2009). Remedies in European Antitrust Law. The Antitrust Law Journal, 76(1).
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14 E.g. Case M.3817 – Wegener/PCM/JV.

15 E.g. Case AT.39316 – GDF foreclosure.

16 E.g. Case M.4180 - Gaz de France/Suez.

17 E.g. Case AT.39654 – Reuters Instrument Codes.

18 E.g. Cases AT.39678 & 39731 - Deutsche Bahn I & II.

19 E.g. Case AT.39398 - Visa MIF.

20 E.g. Case M.6844 – *GE/Avio*.

21 See Merger Remedies Notice, paragraph 17.

22 See Hellström, P., Maier-Rigaud, F., & Bulst, F. W. (2009). Remedies in European Antitrust Law. *The Antitrust Law Journal*, 76(1), or Kwoka, J. (2017). Merger Remedies: An Incentives/Constraints Framework. *The Antitrust Bulletin*, Vol 62, Issue 2.

23 See Merger Remedies Notice, paragraph 17.

24 See e.g. Hoehn, T., & Lewis, A. (2013). Interoperability remedies, FRAND licensing and innovation: a review of recent case law. European Competition Law Review, Vol. 34, Issue 2, p. 101.

distorting the behavior of affected parties in unintended ways such as providing a negative incentive to innovate.²⁵ Behavioral remedies are often accepted to complement other remedies in a "commitments package" to ensure their effectiveness.

3. Access Remedies

Access remedies seek to eliminate the competition concern identified by requiring that access is granted at appropriate terms to an asset necessary to enable third parties to compete. The asset could be key infrastructure or intellectual property, for example:

- patents;²⁶
- technology;²⁷
- natural gas;28
- capacity in gas import infrastructure;²⁹
- airport slots;³⁰
- mobile telecommunications network;31
- network for supplying traction current;³²
- technical information;³³ and
- data under copyright.³⁴

The granting of access is aimed at removing or lowering a barrier to entry or expansion to enable third parties to enter the market or to compete for a larger part of the market.

Access remedies do not neatly fall into the categories of structural or behavioral remedies and are therefore presented here as a separate category. The Merger Remedies Notice discusses them under the heading "other remedies" but also refers to the granting of access to key

25 See note 24 above.

26 E.g. Case AT.38636 - Rambus.

27 E.g. Case M.6564 – ARM/Giesecke & Devrient/Gemalto/JV.

28 E.g. Case M.3696 — *E.ON/MOL*.

29 E.g. Case AT.39316 - GDF foreclosure.

30 E.g. Case AT.39596 - British Airways/American Airlines/Iberia or Case M.5335 - Lufthansa/SN Airholding (Brussels Airlines).

31 E.g. Case M.6992 – Hutchison 3G UK/Telefonica Ireland.

32 E.g. Cases AT.39678 & 39731 — Deutsche Bahn I & II.

33 E.g. Case AT.39230 - Rio Tinto Alcan.

34 E.g. Case M.7337 – *IMS Health/Cegedim business*.

35 For example, the Merger Remedies Guidance of the Competition and Markets Authority in the UK (last updated in 2018) distinguishes between "IP remedies," which it considers may have features of structural or behavioral remedies depending on their formulation, and access remedies, which it considers to be behavioral remedies. See also Sependa, P. A. (2013). Structural remedies under European Union antitrust rules. *Concurrences*, No. 2.

36 See Merger Remedies Notice, section 3.



infrastructure or inputs as a structural remedy.³⁷ Others suggest that access remedies are behavioral,³⁸ non-structural³⁹ or "quasi-structural"⁴⁰ remedies. While access remedies a capable of achieving a structural effect on the market concerned, such an effect is not always guaranteed. A key aspect in this regard is whether the undertakings concerned actually commit to grant access to one or more third parties or whether they commit to offer to grant access in the event of a request from a third party.⁴¹ Access remedies can include the transfer of an asset.⁴² More often, however, they are designed to enable access through a supply, lease, license or other type of agreement that leaves the ownership of the assets unchanged. Moreover, even where such an agreement enables access for an unlimited duration, it will not necessarily be as permanent as a transfer of ownership since the agreement may be terminated. In this regard, access remedies are less contentious as property rights are less affected than in a divestiture. In contrast to divestiture commitments, behavioral and access remedies often need to be implemented over many years⁴³ and can even be unlimited in duration⁴⁴ and therefore require monitoring measures over a long-term period.

While divestitures, once implemented, are definitive, 45 there remains a possibility for the undertakings concerned to request an amendment or waiver of long-term behavioral or access commitments under the review clause long after the original decision. 46

III. THE COMMISSION'S PRACTICE

In order to gain a better understanding of the Commission's remedies practice,⁴⁷ we have reviewed the Commission's decisions to accept or impose remedies in antitrust and merger cases over the period from November 2004 to December 2018.⁴⁸ This period is split into three periods (November 2004 to January 2010, February 2010 to October 2014 and November 2014 to December 2018) which roughly corresponds with the terms of DG Competition's Commissioners.⁴⁹

Overall, we have reviewed 309 Commission decisions, including 55 antitrust decisions and 254 merger decisions. These decisions were reviewed with a view to categorizing each case according to the type(s) of remedies accepted or imposed. This work relied on the text of the decisions and commitments published by the Commission by the end of January 2018 as well as in some cases on the Commission's press releases and Q&A documents. All cases were categorized according to whether the remedies included structural, behavioral or access remedies. Since remedies packages often consist of several types of remedies a decision can fall into more than one category so that the total number of remedies over all types exceeds the total number of cases.

- 37 See Merger Remedies Notice, paragraph 17.
- 38 See for example the Commission's contribution to OECD. (2007). Remedies and Sanctions in Abuse of Dominance. Policy Roundtables.
- 39 See Motta, M., Polo, M., & Vasconcelos, H. (2007). Merger remedies in the European Union: An overview. *The Antitrust Bulletin*, Vol. 52, Nos 3 & 4, 603-631, or the Merger Remedies Guide published by the International Competition Network (2016), Annex 2. Retrieved from https://www.internationalcompetitionnetwork.org/portfolio/merger-remedies-quide/.
- 40 See for example Motta, M., Polo, M., & Vasconcelos, H. (2007). Merger remedies in the European Union: An overview. *The Antitrust Bulletin*, Vol. 52, Nos 3 & 4, 603-631, OECD. (2011). Remedies in Merger Cases. *Policy Roundtables*, or Competition Bureau Canada. (2006), Information Bulletin on Merger Remedies in Canada.
- 41 E.g. Case M.5440 Lufthansa/Austrian Airlines.
- 42 E.g. in Case M.6607 US Airways/American Airlines airport slots would effectively be transferred to the new entrant if appropriate use had been made of the slot by the new entrant through the access remedy over a certain period.
- 43 For example, five years in AT.39592 Standard & Poor's.
- 44 E.g. the interfacing commitment in Case M.3083 GE/Instrumentarium or the airport slot release commitments in Case M.3770 Lufthansa/Swiss.
- 45 In merger cases, commitments accepted by the Commission will normally require the merged entity not to re-acquire material influence over the whole or part of the divestment business for a period of 10 years, unless the Commission finds that the structure of the market has changed to such an extent that the absence of influence over the divestment business is no longer necessary to render the proposed concentration compatible with the internal market. After this 10-year period, the merged entity may (re-) acquire the divestment business. Such a transaction may not necessarily be subject to merger control. See Merger Remedies Notice, paragraph 43.
- 46 In Case M.3280 Air France/KLM for example, the Commission agreed to waive a slot release remedy as well as other related commitments more than 15 years after the conditional clearance decision.
- 47 A more detailed analysis of the Commission's practice can be found in Loertscher, B., & Maier-Rigaud, F. P. (2020). On the Consistency of the European Commission's Remedies Practice. In D. Gerard, & K. A., *Remedies in EU Competition Law: Substance, Process, Policy*, Kluwer Law International.
- 48 Decisions relating to cartel investigations have not been considered for this purpose.
- 49 The last of the three periods does not fully cover the current Commissioner's first term.



It should be noted that this categorization is not always straightforward and there are of course instances in which a different categorization could arguably be used. Despite these inherent difficulties, this review provides some insight into the key differences in the Commission's remedies practice in antitrust and merger cases as well as the development of this practice over a longer period of time.

A. Comparison of Antitrust and Merger Decisions

Figure 1 presents the share of the different types of remedies accepted (or imposed) by the Commission in antitrust and merger cases in the three periods defined. The share of decisions that included cease-and-desist-orders but do not impose specific other remedies are represented with crosshatched columns.

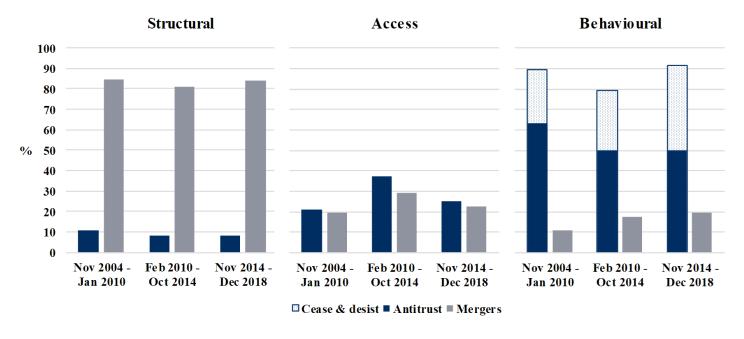


Figure 1: Remedies in antitrust and merger decisions

Source: Loertscher & Maier-Rigaud (2020) based on public Commission decisions. 50

The overwhelming preference for structural remedies in merger cases stands in stark contrast to the very low share of antitrust cases involving structural remedies. Figure 1 also shows that this practice has not changed over time.

In line with the Commission's Merger Remedies Notice, over 80 percent of conditional merger clearances in either Phase I or in Phase II involve a structural remedy.⁵¹ Conversely, only a limited number of mergers have been cleared subject to behavioral remedies. In this regard it is worth recalling that the small share of merger decisions including behavioral remedies indicated in Figure 1 includes decisions in which behavioral remedies were accepted as part of a remedy package that also included other types of remedies.

Figure 1 reveals the importance of behavioral remedies in Article 9 decisions. This prevalence is even stronger in Article 101 cases than in Article 102 cases. Only in the period from February 2010 to October 2014 did not all Article 9 decisions relating to infringements of Article 101 include behavioral remedies.⁵²

No case has been identified in which a decision relating to an infringement of Article 101 led to structural remedies. The occurrence of structural remedies is also very rare in Article 102 cases.

⁵⁰ Loertscher, B., & Maier-Rigaud, F. P. (2020). On the Consistency of the European Commission's Remedies Practice. In D. Gerard, & K. A., *Remedies in EU Competition Law: Substance, Process, Policy.* Kluwer Law International.

⁵¹ Overall, 212 out of 254 conditional merger decisions reviewed included structural remedies.

⁵² The exceptions are two aviation cases (AT.39596 – *British Airways/American Airlines/Iberia* and AT.39595 – *Continental/United/Lufthansa/Air Canada*) in which airport slot release and other commitments were accepted that have been categorized as access remedies.

Figure 1 also indicates an increasing occurrence of access remedies in Article 9 decisions rising from four out of 13 cases in the period from November 2004 to January 2010 to nine out of 17 cases in the period from February 2010 to October 2014 and three out of six cases in the period from November 2014 to December 2018.

While no Article 7 decisions were categorized as imposing access remedies, this is due to the fact that cease-and-desist-orders do not specify how compliance should be ensured. In certain cases, it would, however, be expected that compliance requires providing (better) access to essential assets to competitors.

Figure 1, however, shows no decrease in behavioral remedies accepted in Article 9 decisions. The higher occurrence of Article 7 decisions may indicate a reduced willingness by the Commission to accept remedies under Article 9 or firms may find it less appealing to offer commitments under Article 9 to the Commission.

With respect to access remedies, we observe a similar share of antitrust and merger cases that include such remedies and those shares also developed similarly over time. Their share increased in the period from February 2010 to October 2014 compared to the previous period but fell again in the period thereafter.

IV. CONCLUSION

The review of the Commission's case practice in antitrust and merger cases over a period of more than 14 years demonstrates stark differences in the Commission's approach to remedies in these two areas of competition enforcement. The Commission mainly relies on behavioral remedies to address the competition issues underlying antitrust infringements while it displays a strong preference for structural remedies in merger investigations.

These different approaches to solving competition problems seem inconsistent and difficult to reconcile. On the one hand, while the legal hurdle for imposing structural remedies under Article 7 is certainly perceived to be higher than accepting them under Article 9 or in merger cases, the overwhelming use of behavioral remedies in antitrust cases suggests that behavioral remedies are in the Commission's view an effective tool to resolve competition concerns. In order to address antitrust concerns, the Commission requires structural changes affecting firms' incentive structures only in exceptional cases.

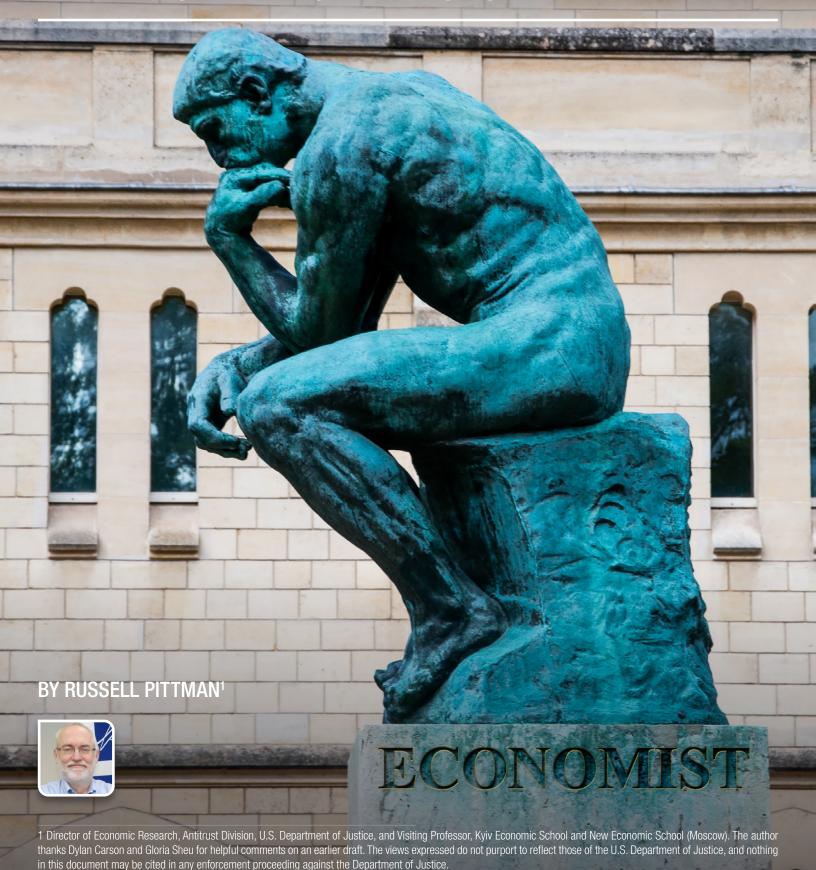
On the other hand, merger decisions are based on the idea that the risks to effective competition derive from changes to the structure of the market and therefore typically require structural remedies. The Commission's merger remedies practice therefore suggests that behavioral remedies are not "as effective" in preventing restrictions to effective competition. If behavioral remedies are, however, an effective tool and if it is not necessary to change the structure of the undertaking in question to prevent effective competition from being restricted, then proportionality would suggest that they should be used more often in merger cases as well. This would in particular have to be the case considering the somewhat more uncertain nature of any forward-looking analysis indicating negative merger effects and despite the fact that pre-merger assets may not be integrated yet.

The review of the Commission's remedies practice across antitrust and merger cases raises the question whether the theory underlying the Commission's merger remedies practice or the theory underlying the Commission's antitrust remedies practice is flawed or whether its reluctance to require structural remedies in antitrust cases and its corresponding reluctance to accept behavioral remedies in merger cases is driven by factors other than the underlying economics of the cases.

The Commission's remedies practice may rather be a result of differences in the Commission's negotiation position and pragmatism. While the Commission may balk at the suggestion that it is involved in negotiations when deciding to impose or accept remedies, there is no denying that firms' incentives are to try and propose the least burdensome remedies that the Commission will accept and they will typically make several proposals to the Commission over the course of the proceedings to design the remedies in a manner acceptable to the Commission. This is as true in merger cases as it is in Article 9 cases. Even in Article 7 cases, commitment discussions may have taken place earlier in the proceedings. In addition, not only the Commission but also the parties are aware of the possibility of judicial review of the Commission's decisions. The presumed higher legal threshold for imposing structural rather than behavioral remedies under Article 7 also reduces the likelihood of structural remedies being proposed under the Article 9 procedure. Firms may not wish to propose remedies for an Article 9 decision that are substantially tougher than the remedies the Commission could impose under Article 7. By contrast, in merger control proceedings the merging parties are in most cases under intense pressure to complete the review process quickly.

The stark differences identified between merger and antitrust remedies is, however, in part driven by a different distribution of competition concerns within these two areas of competition law. While the theories of harm underlying antitrust and merger investigations are often ultimately the same, their distribution is different. While in merger cases the concerns are often horizontal, Article 102 cases often involve concerns that are of a vertical nature and, even though Article 101 cases often also raise vertical concerns, it may be possible to resolve these concerns without resorting to structural remedies. Nevertheless, the stark contrast found in the review suggests that there is at least a subset of cases where concerns are identical and where one therefore would have expected an identical approach to resolve the identified competition concern.

AN ECONOMIST'S THOUGHTS ON BEHAVIORAL REMEDIES IN MERGER ENFORCEMENT



There is by now a substantial literature examining the experience in both the United States and the European Union with the imposition by enforcement agencies of remedies as a condition for a merger to proceed without challenge.² Increased recent interest may have been encouraged by both the refusal of the Antitrust Division of the Justice Department ("DOJ") to accept a settlement offer in the *AT&T/Time-Warner* merger litigation that was arguably similar to that accepted by DOJ and FCC in the earlier *Comcast/NBCU* merger;³ the announcement by the DOJ that it was withdrawing its 2011 Policy Guide to Merger Remedies, returning to the 2004 guide until a "review" leads to an "updated" policy;⁴ and the litigation in the Southern District of New York that encompassed the consent decree accompanying the recent *T-Mobile/Sprint* merger.⁵

The broad goals of the agencies have arguably remained consistent over the years: to allow mergers to take place that will achieve efficiency gains, while preventing harm to competition, and to protect the integrity of the competitive process in the relevant markets as opposed to seeking to dictate particular outcomes.

In addition, a number of more specific "lessons" of the past – from failures as well as successes – seem to have become broadly accepted in recent years:

- Structural remedies are generally preferred over behavioral remedies;
- Structural remedies should where possible include the divestiture of complete existing "business units" rather than seeking to assemble a
 package from various assets from one or both firms, even if some portions of the business units are not part of the competitive problem;⁶
- Nevertheless, structural remedies may sometimes need to be supported by behavioral measures if only as a transition mechanism;⁷
- The merging firms have clear incentives to seek buyers and/or to package assets in such a way as to create a weak competitor going forward; thus
- The agencies must take care that buyers have both the experience and the financial capability to manage the divested assets successfully, as well as ensuring that the assets are not allowed (or encouraged) to deteriorate in quality during the process of negotiation and divestiture.⁸

However, as usual, the devil is in the details, and some of these "lessons" merit a closer look, especially in light of recent developments in both scholarship and jurisprudence. In particular, I will argue in this short article that behavioral remedies may be even more complex and raise more complicated economic issues than has been previously appreciated, so that there is perhaps even more reason than already understood for agencies to resist their surface allure.

Begin with the structural/behavioral distinction. Structural remedies — the divestiture of particular assets of one or (less often) both of the merging parties — are generally favored because they seek to protect the competitive process itself: to rely on the profit-maximizing incentives of the firms in the post-merger market to maintain competition, with the standard benefits of Adam Smith's invisible hand to follow. Behavioral remedies — also called "conduct remedies" — on the other hand, seek to force the merged firm to behave in ways that it may not find profit-maximizing: most often, to force it to supply a particular good or provide access to a particular asset to competitors, when its profits might be higher if it could decline to do so. Thus, behavioral remedies generally require continued monitoring of the behavior of the merged firm by an agency and/ or a court — an activity that neither the agencies nor the courts are generally well equipped to perform, *a fortiori* if they are monitoring behavioral

² See, most recently, Christopher A. Wetzel, Strict(er) Scrutiny: The Impact of Failed Divestitures on U.S. Merger Remedies, 64 Antitrust Bull. 341 (2019).

³ Angeline Woods & Jenn Mellott, Merger Remedies in the EU and U.S.: Lessons from Recent Practice, 33 Antitrust 59 (2019).

⁴ Makan Delrahim, "It Takes Two: Modernizing the Merger Review Process," Remarks at the 2018 Global Antitrust Enforcement Symposium, Georgetown University Law Center, September 25, 2018, available at https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-2018-global-antitrust.

⁵ See State of New York, et al., v. Deutsche Telekom AG, et al., Decision and Order, February 11, 2020, and United States, et al., v. Deutsche Telekom AG, et al., Competitive Impact Statement, https://www.justice.gov/atr/case-document/file/1189501/download.

^{6 &}quot;In evaluating the remedy, the United States recognized that fully preventing the competitive effects of a merger in some cases requires the inclusion of assets or projects that are beyond the affected relevant markets." U.S. v. Bayer, Monsanto, and BASF, Competitive Impact Statement, at 16.

^{7 &}quot;Because many of the divested assets will be separated from Bayer's existing business units and incorporated into BASF, the proposed Final Judgment includes provisions aimed at ensuring that the assets are handed off in a seamless and efficient manner.... The transition services and interim supply agreements are time-limited to ensure that BASF will become fully independent of Bayer as soon as practicable." *Ibid.* at 17.

⁸ See, for example, U.S. Department of Justice, Antitrust Division Policy Guide to Merger Remedies (2004), https://www.justice.gov/atr/page/file/1175136/download.

remedies from other mergers at the same time. Furthermore – as with structural remedies – the merging firms are likely to recognize the limits of the agencies and courts in their monitoring abilities, and so to propose and/or to agree to particular remedial arrangements accordingly.

Behavioral remedies have nevertheless been sought and accepted by the U.S. (and EU) enforcement agencies in settings where the contentions of overall benefits of the merger were accepted, but structural remedies would significantly lessen or destroy those benefits. This has been the case predominantly with proposed vertical mergers as well as with proposed horizontal mergers in markets where intellectual property is a central concern.⁹

A not uncommon example of a behavioral remedy was the set of provisions of the consent decree (2013) in the *Comcast/NBCU* merger. As a condition of regulatory and enforcer approval of this vertical merger between a programmer (NBCU) and a distributor (Comcast), the merged firm agreed to multiple requirements related to the non-discriminatory provision of NBCU content to rival distributors. These included the requirements that the merged firm supply video programming to any OVD (online video provider) both on terms "economically equivalent" to the terms on which it supplies programming to any MVPD (multichannel video programming distributor, i.e. other cable and satellite distributors) and on terms economically equivalent to those that the OVD receives from other programmers. The term "economically equivalent" was specified to take account of, "among other things," differences in advertising revenues, legal rights, and minimum subscriber and penetration rates (in the former case) and differences in the value of the programming (in the latter case).¹⁰

In this particular matter, of course, the agency (DOJ) and the court could take advantage of the expertise and resources of the regulator (FCC) in monitoring future transactions in order to prevent discrimination against non-vertically-integrated distributors. Nevertheless the mere summation of the terms of the consent decree makes clear the potential for future disputation over the terms of future supply agreements, beginning with the fact that the decree defines "economically equivalent" as meaning "the price, terms, and conditions, that, in the aggregate, approximate those" in the comparator transactions, and moving into the question of how, exactly, those terms are to "take account of" the additional factors enumerated. In the event, the FCC docket of post-merger related proceedings is quite extensive.¹¹

In addition, note that any requirement of non-discrimination raises the question of how the set of provisions that will act as comparators for the new arrangements are determined. To the degree that non-discrimination requirements reference contracts previously signed and arrangements previously put into place, so far, so good; however, contracts and arrangements change over time, and if – for example – a low current price to some customers limits the supplier's ability to raise prices on others, that may provide an incentive for the firm to raise the price to the former. In other words, a non-discrimination requirement aimed at protecting one set of customers may, all else equal, act to harm another – and, in that respect, be ineffective in protecting the former.

Arguably, similar issues were raised by the non-discrimination provisions in a number of other consent decrees. For example:

- The FTC consent order (2001) in the *AOL/Time Warner* merger, which required the merged firm (a) to enter into cable broadband internet service provision agreements with non-affiliated internet service providers ("ISPs") under various circumstances "on terms comparable to" agreements with other non-affiliated ISPs or major cable providers, and (b) to offer DSL service to customers in geographic areas served by its affiliates "at retail pricing, terms, and conditions that are the same or comparable to" those in areas not served by its affiliates, "*provided, however*, that [the merged companies'] pricing may reflect any actual differences in Costs" (*sic*; emphasis in original).
- The FTC consent order (2007) in the United Launch Alliance ("ULA") of Lockheed Martin ("LM") and Boeing, which required the joint venture and its parent companies to behave in a non-discriminatory manner toward competitors of the joint venture and competitors of the "space vehicle business" of the parent companies, where discrimination was defined as to "advantage Boeing or LM or disadvantage a competitor of Boeing or LM ... [or] to advantage ULA or disadvantage a competitor of ULA ... provided, however, that the determination of compliance or non-compliance with the non-discrimination provisions of this Order shall take into account that different firms will take different competitive approaches that may result in differences ... in price, schedule, quality, data, personnel, investment ..., technology, innovations, design, and risk."

⁹ See, e.g. Scott Sher & Kellie Kemp, *A Comparative Analysis of the Use of Merger Remedies in Technology Industries*, 14 CPI Antitrust Chronicle. 1 (2014); Benjamin Loertscher & Frank Maier-Rigaud, *On the Consistency of the European Commission's Remedies Practice*, presented at 14th annual conference of the GCLC, Brussels, 2019, and Wetzel, *supra* note 2.

¹⁰ U.S., et al., v. Comcast, General Electric, and NBC Universal, Modified Final Judgment, at 9-14.

¹¹ See https://www.fcc.gov/ecfs/search/filings?proceedings_name=10-56&sort=date_disseminated,DESC and, for example, the most recent lengthy statement of the merged firm of its Annual Report of Compliance with Transaction Conditions, https://ecfsapi.fcc.gov/file/10129128581216/MB%2010-56%20Comcast%20NBCUniversal%20Final%20 Compliance%20Report%20(2018-01-29).pdf. In addition, some disputes reportedly were submitted for private arbitration and so not publicly announced.

• The DOJ-negotiated consent decree (2011) in the *Google/ITA Software* merger, which required the merged firm to offer ITA's airfare pricing and shopping engine QPX to non-airline-affiliated "online travel intermediaries" ("OTSs") on "commercial terms (e.g. price, functionality, minimum query volumes and permitted uses of QPX, as well as customization and query tuning services for QPX) that were "fair, reasonable and non-discriminatory judged exclusively in relation to the OTI's chosen contract term, desired fee metrics (e.g. per-query, per-ticket, or per-[Passenger Name Record]), reasonably expected query volume, the minimum query volume to be included in such QPX Agreement, and the commercial terms of QPX Agreements in effect between [the merged firm] and Similarly Situated OTIs" – where "Similarly Situated OTIs" has its own multiline definition.

An additional complication arises when a behavioral decree prohibits a firm from discriminating in its supply of a product to a competitor *vis-à-vis* the terms on which it supplies itself – its internal price. Such decree provisions raise the frequently noted difficulty of attaching meaning to the prices assigned to internal firm transfers – "transfer prices" – which may be affected by tax, regulatory, international trade, and other factors that render such prices less than meaningful as proxies for actual market transactions. In addition, as with the previously analyzed provisions, a requirement that a firm sell a product to outsiders at the same price that it transfers it internally in principle provides an additional incentive for the firm to set transfer prices strategically. The FCC recognized this issue in both its *Comcast/NBCU* and *News/Hughes* decisions, noting in the former that "To facilitate the combined entity's exercise of a uniform-price-increase strategy, Comcast could pay the same [transfer] fees as its MVPD rivals or could choose to pay the highest fee that NBCU charges a competing MVPD."

Two examples of this type of requirement are the following:

- The consent decree (2003) in the DOJ challenge to the *Northrop Grumman/TRW* merger, in which the merged firm agreed not to "choose or advantage Northrop, or to reject or disadvantage a Northrop Prime or Payload competitor, in the procurement process for any reason," and in particular that the firm "shall not discriminate in favor of its in-house proposal team against any other Prime Contractor on any basis, including but not limited to, price, schedule, quality, data, personnel, investment ... technology, innovations, design, and risk."
- The European Commission ("EC") decision (2000) in the *Vodafone Airtouch/Mannesmann* merger, which coupled a divestiture with the requirement for "third party non-discriminatory access to the merged firm's integrated network.... The provision of a roaming tariff and/ or wholesale services will be made on a non-discriminatory basis between operators of the merged entity's group and other mobile operators. The non-discrimination principle will apply to both pricing and quality of the service." In this case the EC sought to address the problem of the potentially strategic choice of transfer prices by adding an Annex directing the firm to use a specific methodology ("a fully allocated cost model") for the determination of the internal price.

The previous two issues are broadly understood, even if they raise problems whose solutions are not obvious. The EC's *Vodafone* decision raises a third issue regarding the compulsory supply of a good or service to a competitor that is perhaps not as widely discussed in the antitrust world, and has to do with a parallel issue in the world of infrastructure regulation. At one time, most enterprises in infrastructure sectors around the world – telecommunications, electricity, railways, and so on – were vertically integrated monopolies, either regulated (the U.S. and the UK) or owned (the rest of the world) by governments. Advances in both technology and economic understanding have led in recent decades to movements to create competition in at least parts of these sectors – typically the parts that are not the network infrastructure itself. So, for example, competing electricity generation companies may be created or encouraged that will compete to supply electricity into a monopoly transmission and distribution system, or competing freight train companies may operate over a monopoly railway track and signaling infrastructure.¹⁴

An immediate and crucial question raised by such a reform is whether to permit the infrastructure enterprise to participate in the competitive portion of the sector – whether, to use the old *U.S. v. AT&T* example, a monopolist of the copper-wire, "last mile" network should be allowed to sell services like long distance or internet that rely on connection to the network. This is the "vertical separation" or "unbundling" vs. "third party access debate." Similar questions may be raised in discussions of remedies in particular antitrust cases, especially regarding the licensing of intellectual property. 16

¹² See, e.g. Kimberly A. Clausing, Tax-motivated transfer pricing and US intrafirm trade prices, 87 J. PUB. ECON. 2207 (2003).

¹³ Comcast/NBCU decision by FCC at ¶49; see also News/Hughes decision at ¶¶89-100.

¹⁴ See, for example, David Newbery, Privatization, Restructuring, and Regulation of Network Utilities (1999).

¹⁵ Timothy J. Brennan, Why regulated firms should be kept out of unregulated markets: Understanding the divestiture in United States v. AT&T, 32 Antitrust Bull. 741 (1987).

¹⁶ U.S. Department of Justice, Antitrust Division Policy Guide to Merger Remedies (2004), at III.D; Sher & Kemp, supra note 9.

However, there is a second question that is quite important and widely debated in the infrastructure context and may be similarly important but seemingly less familiar in the antitrust context: the level as well as the *structure* of the price of the service. As economists learn early in their studies, in industries with high levels of fixed or sunk costs but low levels of marginal costs – for example, railroads and intellectual property – the standard theorem that the welfare-maximizing price is that set at marginal cost does not apply.¹⁷ If, as will typically be the case in such a context, marginal cost is below average cost, then marginal cost pricing does not compensate the firm for its initial investments, and so will likely discourage future investments. On the other hand, average cost pricing ("fully allocated cost pricing" in the traditional regulatory context), while fully compensating the firm for its investments (though the basis on which the fixed costs are allocated is generally arbitrary), inefficiently denies the service to those who would be willing to pay their marginal cost of supply – a welfare loss. Economic theory teaches that in such cases some form of discriminatory pricing is actually efficient – whether a multi-part tariff (second degree price discrimination, according to the Pigouvian label) or Ramsey-Boiteux pricing (third degree price discrimination).¹⁸

Thus the dilemma, the circle that resists squaring: whether for trains or for intellectual property, antitrust enforcers and regulators are strongly inclined toward requirements for non-discrimination in order to encourage and protect competition, but the efficient recovery of fixed and sunk costs as well as the encouragement of future investment may call for discrimination. This dilemma was explicitly recognized in DOJ's 2004 Policy Guide to Merger Remedies:

[A] conduct remedy may restrain potentially procompetitive behavior.... Firms often sell to a wide range of customers, some of which have very intense demands for the product and would be willing to pay a high price based on that demand and others of which are not willing to pay nearly so much. When this is the case, and when price discrimination is feasible, permitting the firm to charge low prices to customers that have a low demand for the product and higher prices to customers that have a high demand for the product can increase not only the firm's profits, but total output and consumer welfare as a while. Requiring the firm to charge a single price to all may, in such circumstances, result in a price that excludes the low demand group entirely. (III.A)

However, this discussion does not appear in the 2011 Policy Guide to Merger Remedies (which, as noted, has been withdrawn by DOJ, in favor – for now – of the 2004 Guide).

One escape from the dilemma, especially in the context of intellectual property, may take place if the firm has already enjoyed a monopoly on its IP for some time and so has already recovered its investment. However, this ignores the possible benefits of ongoing investment in the maintenance and improvement of the asset — again, whether railway infrastructure or intellectual property.

An economist may then conclude that procompetitive price discrimination is good, while anticompetitive price discrimination is bad. She might go further and use a less freighted term like "differential pricing" for the former. But that would, of course, beg the question; of all the difficult judgments and conclusions imposed by the requirement of agencies and courts to monitor behavioral consent decrees, this may be the most difficult. If nothing else, it would seem to serve as an additional argument in favor of structural over behavioral decrees wherever possible.

¹⁷ Some would argue that the standard theorem has everyday problems of its own. Russell Pittman, Who Are You Calling Irrational? Marginal Costs, Average Costs, and the Pricing Practices of Firms, Discussion Paper 09-3 (2009), Economic Analysis Group, Antitrust Division, U.S. Department of Justice.

¹⁸ Christopher Decker, Modern Economic Regulation: An Introduction to Theory and Practice (2015).

STRUCTURAL vs. BEHAVIORAL REMEDIES IN BIG TECH SECTORS



I. INTRODUCTION

As the preoccupation about the state of digital industries intensifies across various areas of public policy – ranging from privacy, data protection, labor regulation, electoral integrity, and market power – the "break up big tech" slogan has gained growing centrality in competition policy and related debates concerned with the excessive levels of concentration and dominance of large digital platforms. In the U.S., for example, Elizabeth Warren has argued that tech firms like Facebook, Google, and Amazon have accumulated too much power over the economy and democracy, and should be broken up.² Chris Hughes, the co-founder of Facebook, has also recently urged that it is "time to breakup Facebook." In a similar vein, various other commentators support structural solutions as a way to boost the competitiveness of digital markets.⁴

At a general level, many of the recent calls to break up tech titans are premised on the idea that digital industries have reached an excessive level of concentration and economic power due, among other things, to weak antitrust enforcement and unchecked market power abuses, which allow platforms to degrade quality and privacy, extract excessive amounts of data from users, and hurt nascent firms and innovation without facing effective responses from competitive market forces. In a context of highly concentrated industries where tech companies are perceived as "too big," the desired objective of horizontal break ups is to boost competition through market fragmentation – for example, breaking up horizontally a search engine like Google in order to create a more fragmented market structure where a larger number of general-purpose search engines compete.⁵

At a more granular level, structural proposals often take more specific forms, reflecting a set of related, but at the same time distinct competition policy issues. One of them concerns killer acquisitions, whereby a dominant platform may pre-emptively acquire a small firm with a degree of complementarity at the time of the merger but which may have the potential to become a substitute in the future, as a way to eliminate the threat of a nascent competitor. A major preoccupation of current competition policy debates centers on the fact that some of these acquisitions may escape the standard merger review process and therefore should be subject at a minimum to heightened scrutiny, or more radically should be undone through a breakup. A widely cited example can be found in the merger between Facebook and Instagram.⁶

Another prominent antitrust context where structural solutions have been proposed concerns discriminatory conduct in the presence of extensive vertical integration. When a large platform with substantial control over one market vertically integrates, it may have incentives to leverage market power and foreclose adjacent markets by favoring its own specialized services. The most prominent manifestation of this conduct is represented by various forms of biases in ranked-based results that many platforms provide. This may include for instance Amazon providing preferential prominence to its own branded goods to the disadvantage of third-party sellers on the Amazon Marketplace, or Google's search bias as described in the recent Google Shopping case in Europe. For some, solutions to self-preferencing should include separation between the "core" platform function and the provision of related, specialized services or products in adjacent segments.

While there is an obvious appeal in surgical solutions geared toward restructuring markets, it remains a largely open and controversial question whether structural remedies are feasible or desirable in practice, and whether these instruments truly represent superior responses to specific competition issues vis-à-vis alternative solutions that are more behavioral in nature. In this short commentary, we seek to highlight the

² See Elizabeth Warren, *Here's how we can Break up Big Tech*, Medium, March 8, 2019, at: https://medium.com/@teamwarren/heres-how-we-can-break-up-big-tech-9ad9e-0da324c; Astead W. Herndon, *Elizabeth Warren Proposes Breaking Up Tech Giants Like Amazon and Facebook*, The New York Times (March 8, 2019), at https://www.nytimes.com/2019/03/08/us/politics/elizabeth-warren-amazon.html#.

³ See Chris Hughes, *Opinion: It's Time to Break up Facebook*, New York Times, May 9, 2019, At Https://Www.Nytimes.Com/2019/05/09/Opinion/Sunday/Chris-Hughes-Facebook-Zuckerberg.Html.

⁴ Wired, *Tim Wu Explains why he Thinks Facebook Should be Broken up*, May 07, 2019, at https://www.wired.com/story/tim-wu-explains-why-facebook-broken-up. See also Tim Wu, The Curse Of Bigness: Antitrust in the new Gilded Age (Columbia Global Reports, 2018); Thomas Philippon, The Great Reversal: How America Gave up on Free Markets (Harvard University Press, 2019); Jonathan Tepper, The Myth of Capitalism: Monopolies and the Death Of Competition (John Wiley & Sons, 2018); Lina Khan, *The Separation of Platforms and Commerce* (2019) 119 Columbia Law Review 973.

⁵ See for Instance Jonathan Taplin, *Opinion: Is It Time to Break up Google?* The New York Times (January 20, 2018), At: Https://Www.Nytimes.Com/2017/04/22/Opinion/Sunday/Is-It-Time-To-Break-Up-Google.Html.

⁶ See for Instance Federico, Giulio And Scott Morton, Fiona M. And Shapiro, Carl, Antitrust and Innovation: Welcoming and Protecting Disruption (2019) NBER Working Paper no. 26005.

⁷ See Discussion in Bruno Jullien & Wilfried Sand-Zantman, *The Economics of Platforms: A Theory Guide for Competition Policy* TSE Digital Center Policy Paper Series (September 2019, No. 1).

⁸ See https://ec.europa.eu/commission/presscorner/detail/en/memo_17_1785.

⁹ See Lina Khan, supra note 4.

relationship between structural and behavioral remedies in big tech sectors, and in so doing stress the potential role that behavioral remedies may play in future policy developments in digital markets. First, we briefly highlight the basic tradeoffs between structural and conduct remedies. Then, we discuss some of the pitfalls of structural solutions that may reduce their effectiveness in practice, and in light of these pitfalls we explain why the development of behavioral solutions will retain a critical function in big tech sectors.

II. STRUCTURAL SOLUTIONS IN DIGITAL MARKETS

The standard antitrust remedial toolkit divides into two major categories. At one end of the spectrum are structural remedies, which generally aim at fixing competition issues by restructuring a market. These may involve various degrees of separation, ranging from ownership separation to operational, legal, and accounting division. Examples include the divesture of assets in the context of merger review to preserve efficiencies while removing the source of competitive concern; structural separation in regulated network industries as an instrument to enhance competition in potentially competitive segments previously controlled by a fully integrated monopolist, such as separating the transmission grid from the generation sector in previously integrated electricity utilities; or break-ups as a remedy in abuse of dominance and monopolization cases (as proposed in the *U.S. v. Microsoft* case). At the other end of the spectrum, behavioral remedies impose specific restriction on the conduct of a firm to limit its incentives to exercise market power (for example, regulation of access to non-competitive segments of an integrated firm or bottleneck inputs in network industries such as non-discriminatory access to a transmission or distribution grid).

As it is well known, the major advantage of structural remedies is that they attempt to eliminate anticompetitive problems and incentives at root, without the need for extensive ongoing monitoring and regulatory oversight. At the same time, structural remedies can result in foregone cost economies enabled by integration, and may be implemented on the basis of an arbitrarily set boundary of separation. For their part, behavioral remedies can be more flexible, avoid the costs of separation, and can preserve economies of scale and scope, but they entail the need for ongoing oversight while facing substantial information asymmetries between the regulator and regulated entities. The evaluation of these trade-offs is in practice more complex, however, given that, the structural-behavioral dichotomy is not always clear cut. For instance, structural remedies may need to be supported by behavioral remedies or quasi-structural solutions (for example, licensing of intellectual property rights, information firewalls, etc.). Thus, at times, the two can be complements, or in the merger context where structural divesture may be complemented by behavioral remedies such as supply agreements for the buyer of divested assets.

The economic and technological features of digital platforms raise further challenges in the assessment of the relative benefits and shortcomings of alternative forms of remedies. Among other factors, the pace of technological change makes it harder to define clear and stable market boundaries, which makes separations in a technologically dynamic and fluid environment (where integration may be driven by significant efficiencies) more complex than in traditional network industries such as electricity or railways. At the same time, conventional antitrust remedies must deal with unconventional and often subtle forms of market power exercises, which in turn challenge the role of conduct remedies. Likewise, although structural approaches can offer clear-cut solutions, they do not necessarily go to the heart of the competitive problems affecting markets characterized by strong economies of scale and scope, especially where barriers to entry and switching costs are associated with the importance of network externalities. Hence, while the comparison between the relative costs and benefits of structural and behavioral remedies is necessarily highly context-specific, there are recurrent economic features of big tech industries that call for a degree of caution against generalized break-up proposals and arguably enhance the pertinence of behavioral solutions. In the remaining part of this section, we point to some of the limitations of structural solutions in digital platforms markets.

A. Market Fragmentation and Increasing Returns to Scale and Scope

One substantial limitation of break-up solutions is that various forms of economies of scale and scope represent the underlying economic force driving high levels of concentration in many digital platform markets. On the supply side, various platforms have a cost structure with large fixed costs and negligible marginal costs, and on the demand side many yield benefits in the form of direct and/or indirect network externalities as another source of scale economies. Moreover, data is an additional driver of concentration because data collection and analysis is associated with substantial economies of scale and scope. Depending on the interplay between these forces and counterforces of concentration (product differentiation and multi-homing, in particular, can prevent concentration on a single platform), big tech sectors tend to be associated with very

¹⁰ Plaintiff's Reply Memorandum in Support of Proposed Final Judgement, United States v. Microsoft Corp, Civil Action No 98-1232 (DC Filed May 17, 2000).

¹¹ OECD, Structural Separation in Regulated Industries: Report on Implementing the OECD Recommendation (2016).

concentrated market structures, at the extreme possibly giving rise to natural monopolies. ¹² Given these inherent tendencies, a horizontal breakup appears in many cases as a non-sustainable solution (as winner-take-all features may recreate a concentrated market structure) that clashes with the fact that concentration is a natural, and often efficient outcome in a world of increasing returns to scale. In addition, horizontal break-ups may not necessarily address the inherent problems of inter-platform competition associated with network externalities and the resulting nature of switching costs and entry barriers that characterize many digital industries.

B. Merger Breakups

The issue of killer acquisitions is more complex, due to the current lack of clear limiting principles both for *ex ante* and *ex post* review of mergers involving potential competitors. First, proposals in favor of post-merger break ups presume that the merger of a nascent competitor was wrongly cleared and that its competitive harms escaped the standard merger review process, issues around which there is growing support but which remain controversial.¹³ Second, it is not obvious that a post-merger break up will have the expected result of effectively restoring competition (especially potential competition) once the two entities have already achieved full integration.

This is not to say that there is no merit in increasing the *ex post* review of specific mergers in tech sectors. The case for *ex post* challenges can be particularly compelling when accounting for the unavoidable hurdles confronted by more proactive pre-emptive merger review *ex ante*. While in theory a superior approach to a post-merger break up, a more stringent *ex ante* policy toward killer acquisitions is likely to face a number of obstacles due to the inherently speculative and uncertain task of predicting the future potential of a small nascent firm. Hence, while there may be room for tightening the scrutiny of acquisitions involving nascent competitors *ex ante*, a post-merger break up may in exceptional circumstances remain a potential solution to a clearly identified competitive problem that was unpredictable at the time of the merger. Such an ex-post review process is however in need of clearly defined limiting principles.

C. Structural Separation and Vertical Integration

Platforms' vertical integration and associated issues of foreclosure bring to the forefront the interplay between structural and behavioral remedies. A platform entry into adjacent markets may in various cases generate efficiencies and may, in itself, represent a form of platform competition. At the same time, it may raise the risk of vertical foreclosure and market power leveraging, which can be especially pernicious when targeted at nascent competitors. The main example of vertical foreclosure entails what is often labelled self-preferencing or information bias. This often entails an intermediary platform that provides ranked-based results upstream, while also operating in downstream adjacent markets by supplying goods or services on its own platform in competition with third parties (to concretize, one may think of Google general search as the "upstream" market, and various specialized search services, such as flight search and comparison services, as related "downstream" markets). With vertical integration, the control of the ranking and the visual display of ranked results upstream can induce the selection of specific goods or services at the downstream level, including favoring its own. In such cases, web "real estate" where ranked-results are displayed can be seen as an input and distribution channel for downstream competition, whose self-preferential allocation and access may lead to foreclosure.

Vertical separation represents one of the potential solution to foreclosure achieved through intermediation biases — for example, separating Amazon Marketplace from the supply of its own Amazon Basics products that compete with third-party sellers in the same marketplace, or separating Google general search from the provision of specialized search services. The strongest argument in favor of separation is that it removes and tackles directly the incentives of a platform to discriminate. At the same time, structural remedies may need to be accompanied by line-of-business restrictions in order to prevent future re-entry. They also entail a very uncertain exercise when searching for stable boundaries of separation in technologically fast-moving markets, where there are often substantial economies of scale and scope driving efficient forms of vertical integration. Comparisons between vertical separation and alternative behavioral solutions for vertical foreclosure are not likely to yield a conclusive verdict in the abstract, but separation faces a set of hurdles that are likely to reduce its promised simplicity and challenge its concrete application.

¹² Francesco Ducci, Natural Monopolies In Digital Platform Markets (Cambridge University Press, Forthcoming).

¹³ See Shapiro, Carl, *Protecting Competition in the American Economy: Merger Control, Tech Titans, Labor Markets* (2019) Journal of Economic Perspectives, forthcoming; Patel, Menesh S., *Merger Breakups* (October 14, 2019). Available at https://ssrn.com/abstract=3469984.

¹⁴ See Hemphill, C. Scott, Disruptive Incumbents: Platform Competition in an age of Machine Learning (2019) 119 Columbia Law Review 1973.

¹⁵ Richard Feasey & Jan Krämer, Cerre Report, Implementing Effective Remedies for Anti-Competitive Intermediation Bias on Vertically Integrated Platforms (October 2019).

III. THE POTENTIAL ROLE OF BEHAVIORAL INSTRUMENTS

It is notable that most of the recently published official reports on competition and market power in digital platform markets¹⁶ support various forms of more interventionist competition policy enforcement, but none places particular emphasis on structural solutions. Rather, some of them hint at the potential need for some form of regulation.¹⁷ Likewise, it is also important to note that jurisdictions that have in practice adopted more aggressive approaches and stricter enforcement of competition law in platform markets – the European Union in particular – have not to date relied on structural remedies but rather on more behavioral solutions. In particular, in the Google Shopping case, the European Commission has imposed a principle of "equal treatment" requiring the application of the same processes and methods to rival comparison shopping services and Google's own services, which is akin to a non-discriminatory access requirement.

While this does not exclude a priori the desirability of structural remedies in particular contexts, behavioral remedies can often represent a compelling substitute or complement. We argue, in particular, that two important aspects of conduct remedies that pertain respectively to inter-platform and intra-platform competition justify future policy developments in the direction of more refined, and market-specific behavioral solutions.

First, an important aspect of inter-platform competition in industries where barriers to entry and switching costs are directly related to the importance of network externalities is users' ability to switch and multi-home across alternative platforms. Hence, especially in markets with demand-side economies, contestability and platform competition may be better enhanced by behavioral instruments such as portability measures that facilitate switching and multi-homing (for instance, measures that allow drivers to port their profile and reviews across alternative ride-hailing platforms) rather than a single-minded focus on the size of a platform. For these reasons, behavioral solutions that ease the costs of switching for users and reduce entry barriers for disruptive competitors may represent better tools for inter-platform competition than market fragmentation alone.

The form and the relative cost and complexity of each portability measure is likely to differ greatly depending on the context. For instance, data portability measures have been frequently mentioned both in the context of search engines and social networks as an instrument to promote inter-platform competition. However, their actual target and scope is not the same: in the general search market, portability treats past data as a critical input, and access to data is seen as way through which smaller search engines may be better able to compete. In contrast, in the case of a social network like Facebook the target is the entry barrier created by network externalities between users, and portability is geared toward users' profiles or social graphs as a way to facilitate switching between platforms and reduce the frictions created by those network externalities — arguably a simpler task than providing access to search engines' data. Hence, debates on the possible role and design of portability instruments require to be tailored to the particularities of a given market and service.

Second, another important feature of behavioral remedies, one that pertains to intra-platform competition and that has been to date largely neglected in the literature, is that digital bottlenecks often benefit from lower scarcity constraints, which in turn enhance their shareability. This is certainly true for ranked display of results performed by various platforms (search results of a search engine or e-commerce platform, for example). At first glance, this may seem counter-intuitive because rankings, by definition, are perceived to be scarce and rivalrous. As one commentator puts it in the context of search results: "There is only one first- ranked position, one second-ranked, and so on. Where a facility cannot accommodate both the monopolist-owner and its rival, the law is clear that the monopolist does not have to 'share.'" 18

In reality, the digital nature of platform rankings challenges this conclusion. The reason is that scarcity of rankings is often wrongly perceived from the perspective of an individual user facing a finite number of ranked results. In practice, however, scarcity should be defined by looking at the other side of the market — namely, those that aspire to be included in a ranking, for which what matters is not an individual user but the total number of users to be reached through ranked results. From this perspective, the problems of scarcity and shareability are overcome when the number of similar searches done on a platform is significant, because the number of available rankings to be allocated is not determined by a single search result page displayed to an individual user in response to a single query, but rather by the *total* number of search result pages presented to all users performing similar queries. Under this light, ranked results may be allocated on a rotational, probabilistic basis across equivalent searches, thus offering more room for mandated shareability between downstream competitors *and* a platform's own

¹⁶ See George Stigler Center for the Study of the Economy and the State — University Of Chicago Booth School of Business, Report by the Committee for the Study of Digital Platforms Market Structure and Antitrust Subcommittee (May 15, 2109); UK Report of the Digital Competition Expert Panel, Unlocking Digital Competition (March 2019); European Commission, Competition Policy for the Digital Era, Final Report (April 4, 2019); Australian Competition and Consumer Commission, Digital Platform Inquiry, Final Report (July 26, 2019).

¹⁷ See for instance the Report by the UK Expert Panel and the George Stigler Center, Id. See also The Economist, Big tech's \$2trn bull run, February 22, 2020.

¹⁸ Marina Lao, Search, Essential Facilities, and the Antitrust Duty to Deal, 11 NW. J. Tech. & Intell. Prop. 275 (2013). See also Cerre Report, supra note 15.

vertical properties. While this is just one among the various aspects to be considered in the evaluation of behavioral remedies in the context of vertical foreclosure, it nonetheless sheds some light on the untapped potential of behavioral solutions in terms of shareability and reduced scarcity constraints.

IV. CONCLUSION

Break-up solutions have tended to dominate the recent public debate on big tech sectors. While structural remedies may remain a potential approach to specific competition issues, especially in the context of merger enforcement, rethinking the potential role of behavioral remedies and how they may complement or substitute for structural solutions in specific sectors represent equally critical policy questions in digital industries.



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