DEFINING REMEDY SUCCESS

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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.[6] However, I am aware of only three retrospective studies of merger remedies, all involving structural relief to resolve horizontal overlap.[7] This shortage of remedy research has

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 "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.

been lamented since at least 2003,[8] 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.[9]

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.

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.[10] 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.

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."

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

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).

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."[12] 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]

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.[19] 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 per-

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.

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.

formance following the divestiture, suggesting a potentially weak remedy, while also finding an output increase at the merged firm, suggesting merger efficiencies.[20]

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.

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?

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.

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.

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]

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.

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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 "[O]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).

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?

32 The New York Times, "The Limits of Divestiture as an Antitrust Remedy," Chris Sagers, Feb. 14, 2017.