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AT&T/Time Warner... What's Next for Vertical Mergers?



TABLE OF CONTENTS

03

Letter from the Editor

19

AT&T/Time Warner and Antitrust Policy Toward Vertical Mergers By Gregory S. Crawford, Robin S. Lee, Michael D. Whinston & Ali Yurukoglu

04

Summaries



Can Vertical Merger Analysis be Salvaged After the AT&T/Time-Warner Merger Decision? By Malcolm B. Coate

06

What's Next? Announcements 32

The Law Deficit in Merger Cases By Thomas C. Arthur

07

CPI Talks... ...with Bruce Hoffman

09

Lessons from AT&T/Time Warner By Dennis W. Carlton, Mark A. Israel & Allan L. Shampine

14

Modernizing the Vertical Merger Guidelines By Steven C. Salop

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LETTER FROM THE EDITOR

Dear Readers,

The July 2019 CPI Antitrust Chronicle features articles on vertical mergers with a focus on the *AT&T/Time Warner* merger case. Indeed, the *AT&T/Time Warner* decision was one of the most eagerly anticipated antitrust decisions in recent years. Was this just a one-off case or is the Justice Department signaling its intention to adopt a more aggressive posture towards vertical integration?

Since the *AT&T/Time Warner* decision, the call to rethink the analysis of vertical integration has grown. Some argue that the processes and procedures of competition authorities need to evolve.

To look back at other CPI articles on the topic of vertical mergers, we recommend our readers to revisit our August 2018 Chronicle on the topic.

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 Bruce Hoffman

In this month's edition of CPI Talks we have the pleasure of speaking with Bruce Hoffman of the Federal Trade Commission ("FTC"). Bruce Hoffman is Director of the Bureau of Competition at the FTC. Mr. Hoffman came to the FTC from Shearman & Sterling, where he was global co-head of the firm's antitrust practice. Previously, Mr. Hoffman served as chair of Hunton & Williams' antitrust practice, and prior to that, as Deputy Director and Associate Director of the FTC's Bureau of Competition.



Lessons from AT&T/Time Warner

By Dennis W. Carlton, Mark A. Israel & Allan L. Shampine

AT&T/Time Warner is the U.S. Department of Justice's first vertical merger challenge in decades. The merging parties hired us initially to provide economic analyses of the antitrust issues raised by the merger and ultimately to assist with and testify in the litigation. There are three keys lessons that we draw from the outcome of the litigation for future antitrust practice. First, history matters, particularly the outcomes of similar integrations or mergers, both in predicting price effects and in testing merger simulation models proposed by economic experts. Second, one should be careful of simulation models of vertical transactions as they can be complicated and fragile. Third, the fact that the courts credited cost-saving efficiencies as credible, cognizable and relevant to the analysis of net harm is likely to be important for the analysis of future mergers, as the role of efficiencies in merger litigation remains an open question.



Modernizing the Vertical Merger Guidelines By Steven C. Salop

In this short article, I highlight some key issues in formulating revised guidelines and legal standards for vertical mergers that several co-authors and I have analyzed in recent articles. These are distilled into five principles. These principles flow from a recognition that the harms and benefits from horizontal and vertical mergers in oligopoly markets are similar, that cognizable vertical merger efficiencies are not inevitable, and that the Section 7 incipiency standard places weight on false negatives. Agencies should evaluate vertical merger efficiency claims as critically as they do for horizontal mergers and should require the merging parties to show that any efficiencies (including EDM) are verifiable, merger-specific and sufficient to reverse the potential anticompetitive effects. The agencies should limit safe harbors and consider a number of anticompetitive presumptions.



AT&T/Time Warner and Antitrust Policy Toward Vertical Mergers

By Gregory S. Crawford, Robin S. Lee, Michael D. Whinston & Ali Yurukoglu

The *AT&T/Time Warner* merger offers a unique opportunity to assess the criteria that in practice may be applied to vertical merger cases when litigated, and also to consider appropriate policy toward such mergers. We first discuss economic theory and evidence regarding vertical mergers, and describe a recent empirical study of ours examining the effects of vertical integration between regional sports networks and multichannel cable distributors. We next consider the lessons to be gleaned from the *AT&T/Time Warner* decision for future litigation of vertical mergers. Finally, we offer our views regarding appropriate policy toward vertical mergers given current economic understanding, concluding that antitrust policy objectives are at present best served through fact-specific inquiries that carefully consider both pro- and anti-competitive effects of proposed vertical mergers.

SUMMARIES



Can Vertical Merger Analysis be Salvaged After the *AT&T/Time-Warner* Merger Decision? *By Malcolm B. Coate*

The *AT&T/Time-Warner* decision rejected the Department of Justice's challenge to AT&T's vertical acquisition of the cable programmer, Time Warner. The litigation focused on a post-Chicago vertical theory that looked good on paper, but could not be substantiated in practice. As the theoretical model imposed a specific structure on the competitive process, its rejection was hardly surprising. Competition in the cable industry involves complex static and dynamic considerations that tend to preclude the application of a static bargaining model. It is important to remember that game theoretic analyses define possibility models, not scientific fact. Simpler vertical theories, focused on the ability of such mergers to enhance or maintain monopoly power by the creation of barriers to entry, avoid the problems that doomed the *AT&T/TW* investigation. Possible examples are presented to illustrate the concepts in network markets.



The Law Deficit in Merger Cases

By Thomas C. Arthur

5

There is a law deficit in merger cases. The Supreme Court has not decided a substantive merger law case in over four decades. There literally is no useable case law on vertical mergers — and AT&T did not create any. The situation is not that much better for horizontal merger law. This legal vacuum has been filled by the agencies' Horizontal Merger Guidelines, which most district courts follow uncritically. The article identifies important issues of merger law that are not appropriate for resolution by agency policy statements, but deserve serious judicial consideration, preferably by the Supreme Court. The article concludes with a few tentative solutions to this problem.

WHAT'S NEXT?

For August 2019, we will feature Chronicles focused on issues related to (1) Editorial Board Antipasto; and (2) State AGs.

ANNOUNCEMENTS

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

CPI ANTITRUST CHRONICLES SEPTEMBER 2019

For September 2019, we will feature Chronicles focused on issues related to (1) LeadershIP; and (2) MFN, Loyalty Programs & Fidelity Rebates.

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 Bruce Hoffman

In this month's edition of CPI Talks we have the pleasure of speaking with Bruce Hoffman of the Federal Trade Commission ("FTC"). Mr. Hoffman is Director of the Bureau of Competition at the FTC.

Thank you, Mr. Hoffman, for sharing your time for this interview with CPI.

CPI has asked for my thoughts on several questions relating to vertical mergers.¹ As an important preface, vertical mergers involve areas of law and economics that are under considerable current scrutiny and development, including (among others) extensive treatment at the FTC's Hearings on Competition and Consumer Protection Law in the 21st Century. Given the analysis and research under way in this area, any views expressed today may be subject to change as our understanding of the relevant issues advances.

With that important caveat, I have been asked to respond to three questions. The questions and responses follow.

1. Under what circumstances, if any, should behavioral remedies be accepted to remedy the likely anticompetitive effects of vertical mergers?

As I have discussed on previous occasions, we are cautious about accepting behavioral remedies as solutions for likely anticompetitive effects of vertical mergers. Our general preference is for structural solutions. Behavioral remedies raise two sets of concerns that are generally less applicable to structural remedies. First, behavioral remedies normally leave the incentive to engage in the harmful conduct unchanged; that is, the benefit to the merged firm of (for example) using information about a downstream competitor to put that competitor at a disadvantage, or of raising the price of an input to a downstream competitor, will continue to exist notwithstanding the remedy. Rather than change incentives — as structural remedies typically do — behavioral remedies rely on rules and consequences (such as the penalties for order violations) to constrain firms from acting on their incentives. This always presents some risk. Second, behavioral remedies typically require fairly robust monitoring and activity by us. They put our staff (or, where applicable, monitors or others) in the position of ensuring compliance with a set of rules for conduct over the term of the order. That imposes burdens on us, and requires us to possess or develop expertise, information, and the other tools necessary to effectuate the remedy.

That said, behavioral remedies have been shown to be effective parts of the FTC's merger tool kit. Research at the FTC has found that the behavioral remedies have succeeded in past transactions. That is consistent with my experience — I have seen behavioral remedies work well, under the right conditions.

We consider behavioral remedies where appropriate and necessary. In a very broad sense, behavioral remedies may be viable options where a vertical merger presents a competitive problem that cannot be addressed by a structural remedy (or where the cost or difficulty of a structural remedy is prohibitive); where the merger offers significant benefits that would be lost if it was not consummated (or that would be lost if a structural remedy was implemented); and where we have a significant degree of confidence that a behavioral remedy would be effective, administrable, and not unduly burdensome to us. The latter point includes situations where we have institutional familiarity with the remedy (such as firewalls to prevent information-sharing, where the vertical concern involves information sharing). Parties should expect, however, that we will be cautious and skeptical about behavioral remedies, and may require substantial persuasion and assistance from the parties in verifying their efficacy (and in implementing them where we reach the conclusion that they are warranted).



¹ Please note that these responses reflect my views, and do not necessarily represent the views of the Federal Trade Commission or any of its Commissioners.

2. What are your views on the use of merger retrospectives of "close cases"? Should more retrospectives be used (in cases of vertical mergers specifically), fewer retrospectives, or are things "just right"?

I view merger retrospectives (including of "close cases") as very important and helpful. Chairman Simons has emphasized the use of retrospectives as valuable tools to enhance our understanding of the effects of mergers, and the FTC, primarily through the Bureau of Economics, is expanding our efforts in this area. I do think that it is important to understand that retrospectives are not always easy or feasible. The costs involved can be high, and it can be difficult to identify the effects of consummated mergers and to properly control for other intervening events and factors. As a result, not every merger, or even every "close case" merger, is necessarily a good candidate for a retrospective, and of course we need to consider resource allocation in deciding what retrospectives to conduct.

3. Are the competitive effects of vertical and horizontal merger inherently different?

This is a very broad question addressing a very fact-specific issue. I don't think it's necessarily the case that every competitive effect of every horizontal merger is inherently different from every competitive effect of every vertical merger. That said, as I and others have previously observed, there is a significant baseline difference between the general competitive effects of vertical and horizontal mergers. Horizontal mergers have an inherent competition-reducing dimension, in that by definition they internalize an externality the merging firms previously inflicted on each other through competition. That effect can be minimal or insignificant, or offset by cost savings or other efficiencies, but it remains the case that the first-order consequence of a horizontal merger is at least some reduction in competition. That is not the case with vertical mergers. Vertical mergers do not have an inherent effect on competition in the way that horizontal mergers do. Rather, vertical mergers can provide substantial procompetitive benefits, but also can harm competition by (for example) providing the means and incentives for the merged firm to degrade rivals' ability to compete. Determining which effect exists, and which predominates, is a fact-specific question.



LESSONS FROM AT&T/TIME WARNER

TimeWarner

BY DENNIS W. CARLTON, MARK A. ISRAEL & ALLAN L. SHAMPINE¹



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9



I. INTRODUCTION

The *AT&T/Time* Warner merger trial represented the U.S. Department of Justice's ("DOJ") first vertical merger challenge in decades, and the parties' arguments and courts' findings are being closely scrutinized.² The authors were retained by AT&T and Time Warner, initially to provide economic analyses of the antitrust issues raised by the merger to the Antitrust Division of the Department of Justice, and ultimately to assist with and testify in the litigation brought by the DOJ to block the deal.³ In our opinion, there are three key lessons from the litigation for future antitrust practice: (1) history matters; (2) be careful of predictive vertical models; and (3) efficiencies matter. We provide some high-level thoughts on each in this article.

II. HISTORY MATTERS

The first key lesson from the *AT&T/Time Warner* trial is that history matters. While there are always differences between transactions, that does not make every transaction *sui generis*. Rather, as in so many fields of study, experiences from the past are often our best guide to predicting the future; outcomes of previous mergers, analyzed through the lens of economic theory and quantitative methods, provide critical evidence in predicting the effects of proposed mergers. Indeed, the Horizontal Merger Guidelines stress the importance of analyzing past mergers and associated natural experiments as part of merger review.⁴

In the *AT&T/Time Warner* litigation, there were several prior vertical integration and disintegration events available to help assess whether it was true, as the DOJ claimed, that vertical integration would harm competition.⁵ We paid particular attention to the vertical merger between Comcast and NBCU, which had many of the same features as the *AT&T/Time Warner* transaction. Our econometric study of that transaction showed that the harmful effects that the DOJ claimed should have happened were not there.⁶ The courts relied heavily on that evidence.⁷

In addition, recent marketplace events illustrated the importance of efficiencies generated by vertically integrated firms in the video industry. In particular, the growth of vertically integrated firms with innovative ways of creating, marketing, and monetizing content has been perhaps the single most important development in the industry over the past several years. For example, Netflix is vertically integrated, as both a content creator and a distributor. And its success rests heavily on its use of data on who is watching its shows and what they are watching to facilitate the creation and marketing of popular content. Prior to the merger, AT&T had such data but was not creating content, and Time Warner was creating content but did not have such data. Hence, the Netflix experience demonstrated that AT&T and Time Warner had complementary assets (direct relationships with and information about consumers at AT&T, and content at Time Warner) that were being underutilized pre-merger, largely because AT&T and Time Warner had trouble figuring out how to coordinate pre-merger and did not do so optimally. The merger was driven in part

2 On June 12, 2018, following almost two years of regulatory proceedings and a six-week trial, Judge Richard J. Leon ruled in favor of AT&T and Time Warner, permitting the firms' planned merger to proceed without conditions. On February 26, 2019, the U.S. Court of Appeals rejected the Department of Justice's appeal of the US District Court's opinion allowing the merger of AT&T and Time Warner to proceed without conditions. The Department of Justice announced soon thereafter that it would not seek additional review of this decision. Memorandum Opinion, Judge Leon, *United States of America v. AT&T Inc., DirecTV Group Holdings, LLC, and Time Warner Inc.*, 1:17-cv-02511-RJL, June 12, 2018 ("Judge Leon Opinion"). Opinion by Judge Rogers, *United States of America, Appellant v. AT&T, Inc., et al., Appellees*, 1:17-cv-02511, USCA Case 18-5214, February 26, 2019 ("Appellate Opinion"). Diane Bartz & David Shepardson, "U.S. Justice Department will not appeal AT&T, Time Warner merger after court loss," Reuters Business news, February 26, 2019, https://www.reuters.com/article/us-timewarner-m-a-at-t/us-justice-department-will-not-appeal-att-time-warner-merger-after-court-loss-idUSKCN1QF1XB.

3 Dr. Carlton testified at trial on behalf of AT&T and his testimony was cited repeatedly by both Judge Leon and Judge Rogers. Dr. Israel was the primary economic expert during the almost two-year investigation by the Department of Justice leading up to the trial. Dr. Shampine was the overall chief of staff for the Compass Lexecon engagement.

4 U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines, August 19, 2010, § 2.1.2. To be clear, the relevant goal in a retrospective is not whether prices changed — in the video industry, prices have been going up for decades whether firms merged or not. Rather, the goal is to isolate the effect of the merger.

5 While parts of the record are not public, redacted copies of the trial transcripts are publicly available. The direct testimony of the government's economic expert Dr. Shapiro was on April 11th, 2018 and Dr. Carlton's was on April 12th, 2018. See also the DOJ website with redacted copies of court filings and DOJ expert reports. https://www.justice.gov/atr/ case/us-v-att-inc-directv-group-holdings-llc-and-time-warner-inc.

6 The DOJ referenced a non-public FCC analysis that claimed to find some price increases as a result of the DIRECTV/Fox integration. The full details of that analysis are not publicly available (and were not available to the parties in the litigation), but the general methodology was described by the FCC based on SNL Kagan data and a limited time period. Those data have since been updated by SNL Kagan. We studied the event using SNL Kagan's updated data for the same time period and found no evidence of a price increase. Our analysis was not disputed by the DOJ.

7 See, e.g. Judge Leon Opinion, §III.B.4 — "Real-World Evidence Indicating That Prior Vertical Integration of Programmers and Distributors Has Not Affected Affiliate Fee Negotiations Undermines the Government's Increased-Leverage Theory of Harm," and §III.B.4.a — "Professor Carlton's Econometric Analyses of Prior Vertical Transactions Found No Statistically Significant Effects on Content Pricing"; and Appellate Opinion, p. 21 ("The district court's statements identified by the government, then, do not indicate that the district court misunderstood or misapplied the Nash bargaining theory but rather, upon considering whether in the context of a dynamic market where a similar merger had not resulted in a 'statistically significant increase in content costs,' the district court concluded that the theory inaccurately predicted the post-merger increase in content costs during affiliate negotiations.")



by the desire to adopt the structure that firms like Netflix have demonstrated is successful in making use of data to improve content creation. Again, the courts recognized the importance of this evidence.⁸

III. BE WARY OF PREDICTIVE VERTICAL MODELS

The second key lesson from the *AT&T/Time Warner* litigation is that predictive models of vertical industrial structure based on Nash-in-Nash bargaining models can be complicated and fragile, in the sense that changes in some theoretical assumptions can matter a lot and the predictions of some models can change substantially given reasonable changes to input parameter estimates, even if one accepts the core economic premises and logic of the model being used. As a result, such models, if feasible, should be tested to see whether they would have predicted the outcomes of historical events, such as past mergers, before relying on them.

In the testimony in the *AT&T/Time Warner* litigation, we highlighted three particular flaws in the government's model, which the court credited. First, core economic assumptions made in the model were inconsistent with the facts of the case. Second, the predictions of the model were not robust — reasonable changes in the empirical inputs of the model (e.g. margins) flipped the sign of the prediction from net harm to net benefit. Third, the predictions of the model were contradicted by actual historical experience.

With respect to the core economic assumptions, the government used a vertical model that had two stages. The first (upstream) stage modeled the determination of input (i.e. content) prices using a Nash bargaining (Nash-in-Nash) model. The second (downstream) stage modeled the determination of prices to final consumers (i.e. viewers of content) — making use of the input prices to each firm established in the prior stage — using a horizontal merger simulation model. The overall model required a number of strong assumptions. We focus on one particular assumption here.⁹

In the government's Nash bargaining model in the upstream market the ultimate terms of the bargain depend on the outcome that would occur if there were no agreement. For example, the terms of the agreement pre-merger between Time Warner and Comcast would depend on what Time Warner and Comcast would do — and thus what their respective profits would be — if those parties failed to reach an agreement and there was a blackout of Time Warner on Comcast. In order to predict the effects of the merger, one asks how, post-merger, the no-agreement points change and thus how the outcome of the bargaining process is predicted to change. Hence, in such models, getting the no-agreement point right is critical for accurate predictions of merger effects. But in this case, the government's expert economist got this critical point wrong: The expert ignored that AT&T had agreed not to black out any Time Warner content in its negotiations with rivals such as Comcast, and instead had agreed to continue to supply Time Warner content at either a mutually agreed upon price or at a price that a neutral arbitrator could set. As such, contrary to the government's expert's assumption, the no-agreement point was definitely not a permanent blackout. The courts agreed with our criticism that this error by itself invalidated the government's model.¹⁰

Regarding the model's lack of robustness with respect to reasonable changes in inputs, in this case, the entire exercise depended on accounting for the desirable effects from efficiencies and the undesirable effects from raising rivals' costs to determine the net effect of the merger on prices. And the net effect was predicted to be quite small even under the government's expert's parameter estimates, meaning that small changes in the parameter estimates not only changed the magnitude of the predicted price effect, but actually flipped the sign of the effect, changing a predicted net harm into a predicted net benefit.

⁸ The Comcast/NBCU analysis just discussed was thus conservative in light of subsequent entry that increased competition and increasingly important efficiencies from vertical integration. Judge Leon Opinion, pp. 2-3 ("Watching vertically integrated, data-informed entities thrive as television subscriptions and advertising revenues declined, AT&T and Time Warner concluded that each had a problem that the other could solve: Time Warner could provide AT&T with the ability to experiment with and develop innovative video content and advertising offerings for AT&T's many video and wireless customers, and AT&T could afford Time Warner access to customer relationships and valuable data about its programming.").

⁹ Many other assumptions were also clearly inconsistent with the facts of the industry. For example, the model assumed that each negotiation between a content provider and a distributor is completely independent of every other negotiation. Given the common usage of most favored nations clauses in licenses, that assumption is clearly incorrect. However, there is currently no generally accepted way to incorporate interdependent negotiations into Nash-in-Nash models like the one the government's expert used. Similarly, the government's expert's model did not account for the many long-term contracts in place.

¹⁰ See, e.g. Appellate Opinion, p. 23 ("The post-merger arbitration agreements would prevent the blackout of Turner Broadcasting content while arbitration is pending. ... Consequently, the government's challenges to the district court's treatment of its economic theories becomes largely irrelevant, at least during the seven-year period [of the arbitration commitment].").

More precisely, the government's model, like most vertical models, automatically generated an efficiency effect (the elimination of double marginalization), which causes the merging party, in this case DIRECTV, to lower its prices to final consumers. This efficiency effect increases competition and causes DIRECTV's rivals such as Comcast to lower their prices in response. But the model also predicted another effect in which the merging party, DIRECTV, has an incentive to raise the prices of Time Warner content for rivals such as Comcast, causing the rivals to raise their prices to final consumers, thereby enabling the merging party (i.e. DIRECTV) to raise its prices to final consumers. Because of these offsetting effects, the predictions of the government's model, and often of vertical models generally, on the welfare of all consumers depended heavily on the estimates used for, among other things, profit margins and the intensity of competition for final consumers.

In assessing the merger's ultimate effect on prices, the analyst needs to confirm that the results are not sensitive to reasonable choices for the underlying model inputs — even if one assumes that all the model's underlying assumptions on how bargaining occurs are correct. In the *AT&T/Time Warner* litigation, we were able to show that the small harmful effects that the government's expert predicted became procompetitive effects when one used more reasonable and up-to-date data. The court concluded that in light of that sensitivity, the government had failed to meet its burden of proof.¹¹

Finally, given that the government's vertical model depended on a number of strong assumptions and its predictions were not robust to reasonable changes in the underlying parameter estimates, a fact finder might understandably be skeptical of the model unless it can be shown to have some track record of making accurate predictions in the industry. Similar models to the government's predicted higher prices (net harm) in prior cases, and the government did not dispute that its model would have done so as well, but we demonstrated that such higher prices did not, in fact, occur.¹² Thus, the government model's predictions were contradicted by prior experience in the industry, and the courts noted that fact.¹³

IV. EFFICIENCIES MATTER

The third key lesson, which may have a profound effect on antitrust litigation going forward, is that efficiencies (e.g. cost savings generated by the merger) matter. It may seem obvious that efficiencies should matter, but government agencies and courts may dismiss efficiencies as not "cognizable" for various reasons, and some economists have questioned the role efficiencies should play in a merger analysis.¹⁴ In the *AT&T/Time Warner* litigation, as we noted, efficiencies were (appropriately) inherent to the government's model, and the government's expert's approach was focused on determining the net effect on prices. The courts did not take issue with the government's basic approach, and Judge Leon noted specifically that while the government had failed to meet its burden of proof in establishing there were *any* likely harms, all parties agreed that there would be efficiencies that would benefit consumers.¹⁵ The fact that the courts credited efficiencies as credible, cognizable and relevant to the analysis of net harm is likely to be very important for the analysis of future mergers.

While the *AT&T/Time Warner* litigation concerned a vertical transaction, the principle of crediting efficiencies as central to merger analysis is not, or at least should not be, limited to vertical mergers. The elimination of double marginalization efficiencies that all parties agreed existed and were relevant are effectively cost savings that offset price increases. And all parties agreed that one should weigh the efficiencies' effects

13 See, e.g. Appellate Opinion, p. 21 ("The district court's statements identified by the government, then, do not indicate that the district court misunderstood or misapplied the Nash bargaining theory but rather, upon considering whether in the context of a dynamic market where a similar merger had not resulted in a 'statistically significant increase in content costs,' the district court concluded that the theory inaccurately predicted the post-merger increase in content costs during affiliate negotiations.").

¹¹ See, e.g. Judge Leon Opinion, §III.C.2 — The Evidence Is Insufficient to Support the Inputs and Assumptions Incorporated into Professor Shapiro's Bargaining Model, and p. 149 ("Accordingly, neither Professor Shapiro's model, nor his testimony based on it, provides me with an adequate basis to conclude that the challenged merger will lead to *any* raised costs on the part of distributors *or* consumers – much less consumer harms that outweigh the conceded \$350 million in annual cost savings to AT&T's customers.").

¹² Notice that this is a different test than asking whether past vertical integration has been harmful. It is a direct test of the specific model. However, it is not always practical to implement such tests. For example, available data may not be sufficient to determine with any precision whether a predicted effect actually occurred or not. In particular, if a practice has always been in place, it will likely be difficult to empirically quantify its effects since there would be no contrasting example of pricing in the absence of that practice.

¹⁴ The Horizontal Merger Guidelines, for example, argue that "Efficiencies are difficult to verify and quantify." U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines, August 19, 2010, § 10. See also Jonathan Baker, Nancy Rose, Steven Salop & Fiona Scott Morton, "Five Principles for Vertical Merger Enforcement Policy," Georgetown University Law Center, 2019, available at https://scholarship.law.georgetown.edu/facpub/2148, noting that there is a wide range of views on the treatment of vertical mergers and efficiencies and arguing that not only should there be no presumption of efficiencies from vertical mergers but there should be no "safe harbor" unless both firms compete in unconcentrated markets.

¹⁵ Judge Leon Opinion, p. 149 ("Accordingly, neither Professor Shapiro's model, nor his testimony based on it, provides me with an adequate basis to conclude that the challenged merger will lead to *any* raised costs on the part of distributors *or* consumers – much less consumer harms that outweigh the conceded \$350 million in annual cost savings to AT&T's customers."). Appellate Opinion, p. 29 ("The district court found, and the government agreed, that the merger would result in cost savings as a result of EDM.").

against any incentive to raise prices in order to evaluate the net effect on consumers.¹⁶ There is no economic or logical reason why this approach should be unique to vertical transactions. To the contrary, as a matter of economics, the same logic applies to horizontal mergers.

In conclusion, analysis of vertical mergers can be complicated and difficult. In any merger inquiry, the examination of past mergers can be useful in identifying the important economic forces at work in the industry. Existing models of vertical mergers are still being developed. These models should be carefully evaluated in light of industry history and tested for robustness to reasonable alternative theoretical assumptions and input values based on the facts of the case. Furthermore, analyses should not be limited just to potential harms. Efficiencies are also important and should be accounted for in merger analyses, whether vertical or horizontal.

16 The government did claim that the District Court erred in misunderstanding Nash bargaining and claiming that firms did not maximize profits. However, as described above, the government's claims of error were irrelevant to the main flaws in the government's case and, as the appellate court found, those claims of error were themselves incorrect.



MODERNIZING THE VERTICAL MERGER GUIDELINES



1 Professor of Economics and Law, Georgetown University Law Center; Senior Consultant, Charles River Associates. The opinions expressed in this article are my own and do not necessary reflect the views of my co-authors, colleagues or consulting clients. I would like to thank Dale Collins, David Gelfand, Carl Shapiro, John Vickers, and my co-authors for helpful comments.

I. INTRODUCTION

Several co-authors and I have written articles in the past few years on various aspects of the economics, law, and policy of vertical merger enforcement.² I also was able to provide the lead presentation on vertical mergers at the FTC Hearings, and participate on panels with some of the symposium participants. In this short article, I will highlight some key issues which I analyze in more detail in these other articles.

II. SHOULD THE VERTICAL MERGER GUIDELINES BE REVISED?

I start with the easiest issue. The 1984 Vertical Merger Guidelines should be withdrawn and new Guidelines drafted. Industrial organization and merger analysis have dramatically changed in the past 35 years. Neither modern economic analysis nor actual enforcement expressed in consent decrees supports the approach of old Guidelines.³ To give one example, those old Guidelines pay little attention to the modern analysis of foreclosure.

There are several standard arguments raised against revising the old Guidelines. None of them seem very compelling. I have heard the view that new Guidelines are not needed because everyone knows how to analyze vertical mergers. In light of the controversy expressed at the FTC Hearings and the frequency of superficial analysis, that claim is clearly incorrect. In addition, good government requires that guidelines reflect actual practice. I have also heard the opposite view, that vertical merger analysis is so complicated that useful guidance is impossible. But if the analysis is difficult or complicated, then more guidance is needed, not less. Another rationale is that new Guidelines would lead to more enforcement, which is undesirable. But, this is just ideology overruling analysis. As Judge Leon might say – *Please!*

III. ARE THERE FALSE NEGATIVES?

Advocates for new Guidelines are sometimes asked to identify specific false negative enforcement decisions. However, since investigations are confidential, the transactions can be tough for outsiders to evaluate at the time, and agencies do not provide enough information in their press releases. But after some sodium pentothal, experienced merger lawyers might reveal their surprise that the agencies showed so little interest in the vertical issues, or how quickly the agencies caved, or how easily and unskeptically they assumed elimination of double marginalization and other efficiencies.

I recently analyzed the press releases for two recent FTC clearances (by 3-2 votes) of vertical mergers to determine if either might have been false negatives, and I concluded that *Staples/Essendant* may have been one.⁴ Another notable false negative that I studied – *Jeld-Wen/CMI* – was revealed last year.⁵ In 2002, the DOJ cleared that merger, which was horizontal as well as vertical, but the concerns involved vertical foreclosure. Jeld-Wen and Masonite accounted for more than 80 percent of interior molded door sales. Jeld-Wen, Masonite, and CMI also supplied almost all the doorskins used by unintegrated door manufacturers as inputs for molded doors. Two years later, Masonite publicly announced that it no longer would sell doorskins to these independent manufacturers. In response, Jeld-Wen sent Masonite's press release to Steve's and Sons, one of the largest independents, and suggested that it be discussed further. Jeld-Wen then worsened terms to contract customers and raised doorskin prices to customers without contracts. Jeld-Wen and Masonite then also raised their door prices. This is an example of the "Frankenstein Monster" anticompetitive scenario identified in Krattenmaker & Salop⁶ and modeled in Ordover et. al.⁷ Jeld-Wen also said that it would not renew Steve's contract when it expired, a contract signed shortly before Jeld-Wen announced the CMI acquisition. Steve's complained to the DOJ, which took no action. Steve's then brought a private antitrust case, which it won in 2018 in a jury trial with Carl Shapiro as its economic

2 Jonathan B. Baker, Nancy L. Rose, Steven C. Salop & Fiona Scott Morton, *Five Principles for Vertical Merger Enforcement Policy*, ANTITRUST 13 (Summer 2019) (forthcoming); Steven C. Salop, *Invigorating Vertical Merger Enforcement* 127 YALE L.J 1962 (2018); Steven C. Salop & Daniel P. Culley, *Revising the U.S. Vertical Merger Guidelines: Policy Issues and an Interim Guide for Practitioners*, 4 J. ANTITRUST ENFORCEMENT 1 (2016).

3 Steven C. Salop & Daniel P. Culley, Vertical Merger Enforcement Actions: 1994–July 2018, GEO. U. L. CTR. (Aug. 23, 2018).

4 Steven C. Salop, Analyzing Vertical Mergers to Avoid False Negatives: Three Recent Case Studies, ANTITRUST (Summer 2019) (forthcoming). The three mergers were Staples/ Essendant, Fresenius/NxStage, and Jeldwen/CMI.

5 *Id.*

6 Thomas G. Krattenmaker & Steven C. Salop, Anticompetitive Exclusion: Raising Rivals' Costs To Achieve Power over Price, 96 Yale L.J. 209 (1986).

7 Janusz A. Ordover, Garth Saloner & Steven C. Salop, *Equilibrium Vertical Foreclosure*, 80 AM. Econ. Rev. 127 (1990). The Frankenstein Monster describes a scenario in which the upstream competitor(s) of the merging firm in a concentrated input market gain the power to raise their own prices in response to the foreclosure behavior (e.g. a price increase or refusal to sell) by the upstream merging firm, thereby raising the profitability of the foreclosure. The FTC majority similarly may have overlooked this effect in its analysis of the Staples/Essendant merger. See Salop, *supra* note 4.

expert. Judge Payne has ordered divestiture of CMI.8

Another possible way to identify false negatives is through post-merger econometric studies. Rigorous and reliable econometric studies face a number of difficulties, including lack of access to relevant data, simultaneous confounding market changes, as well as the usual econometric problems. However, during the past decade, a significant number of econometric studies using modern methods have identified the adverse effects of specific vertical mergers.⁹ Econometrics may not be definitive, of course. For example, the study by Jonathan Baker and his FCC colleagues concluded that the *News Corporation/DirecTV* merger led to higher prices.¹⁰ Testifying for AT&T, Dennis Carlton's study concluded the opposite.

IV. ARE THERE DIFFERENT INHERENT EFFICIENCIES AND MARKET POWER HARMS IN HORIZONTAL VERSUS VERTICAL MERGERS?

It is sometimes claimed that vertical and horizontal mergers are inherently different, even in the oligopolistic markets where enforcement typically occurs. It is said that models show that there are inherent efficiencies from vertical mergers and no inherent market power harms, and *vice versa* for horizontal mergers. The contrast between the Cournot-substitutes and Cournot-complements models is the classic example. At the FTC Hearings, Dan O'Brien referred to such "canonical models." Of course, the implications of even these famous Cournot models are less clear cut. As pointed out by Ronald Coase 80 years ago, vertical merger efficiencies often can be achieved *by contract* rather than vertical integration *by ownership*.¹¹ The famous Salant, Switzer & Reynolds model showed that horizontal mergers in simple Cournot-substitutes markets are not profitable, absent efficiencies.¹² This latter result would be said to imply that horizontal mergers of Cournot substitutes have inherent efficiencies.

Even putting aside these general results, the "vertical/good - horizontal/bad" characterization (ported from Orwell's *Animal Farm* into antitrust by Jon Baker) is also not true across all vertical merger models. O'Brien's canon likely includes the famous Spengler article, ¹³ but perhaps not Coase's. The seminal Hart & Tirole model exhibits anticompetitive effects and no efficiencies.¹⁴ The same is true for the Ordover, Saloner & Salop model.¹⁵ These two articles apparently are not among O'Brien's sacred texts. Moreover, if "canonical" models of horizontal mergers showing inherent anticompetitive effects and no efficiencies were to be so worshipped, then horizontal mergers in unconcentrated markets also would be treated as inherently anticompetitive, rather than typically escaping agency scrutiny with a safe harbor.

There are similar inherent market power concerns that arise from vertical mergers in oligopoly markets just as they arise from horizontal mergers. Consider the common vertical merger scenario where the upstream merging firm was competing in the pre-merger world to sell inputs to the unintegrated downstream firms that compete with its future downstream merger partner. In this scenario, that upstream firm was effective-ly a pre-merger "partner" of these unintegrated downstream competitors. After merging, the upstream firm would obtain foreclosure incentives to raise their costs and prices. This is analogous to the price-raising effects of a hypothetical horizontal merger between the downstream merging firm and its competitors. Indeed, it is analytically similar if not equivalent to a standard unilateral effects model.¹⁶ Thus, there is an inherent horizontal effect even in this common vertical merger scenario.

Neither can one say that foreclosure would be necessarily irrational. In an interesting new article based on a very large data set, Boehm and Sonntag find that upstream suppliers are more likely to break relationships with their customers when they merge with those customers'

11 Ronald H. Coase, The Nature of the Firm, 16 Economica 386 (1937).

15 Ordover et. al., *supra* note 7.

⁸ See Steves & Sons, Inc. v. JELD-WEN, Inc., No. 3:16-CV-545 (E.D. Va. Dec. 14, 2018).

⁹ See Salop, supra note 2 at n.103; Baker et. al, supra note 2. Older econometric studies gave mixed results and a number of them were unable to reliably evaluate all the relevant competitive effects. Nor could they typically evaluate whether or not any efficiency benefits were merger-specific.

¹⁰ Jonathan B. Baker et al., The Year in Economics at the FCC, 2010-11: Protecting Competition Online, 39 Rev. Indus. Org. 297 (2011).

¹² Stephen W, Salant, Sheldon Switzer & Robert J. Reynolds, Losses from Horizontal Merger: The Effects of an Exogenous Change in Industry Structure on Cournot-Nash Equilibrium, 98 QuarterLy J. Econ. 185 (1983).

¹³ Joseph J. Spengler, Vertical Integration and Antitrust Policy, 58 J. Pol. Econ. 347 (1950).

¹⁴ Oliver Hart & Jean Tirole, Vertical Integration and Market Foreclosure, 21 BROOKINGS PAPERS ON ECONOMIC ACTIVITY (MICROECONOMICS) 205 (1990).

¹⁶ For details, see Serge Moresi & Steven C. Salop, *vGUPPI: Scoring Unilateral Pricing Incentives in Vertical Mergers*, 79 ANTITRUST L.J. 185 (2013); Steven C. Salop, *Revising the Vertical Merger Guidelines*, FTC HEARINGS PRESENTATION (November 1, 2019) at Slides 12-15; Baker et. al., *supra* note 2.

competitors, relative to when they merge with non-competitors.¹⁷ Both vertical and horizontal mergers can also facilitate coordination. This can involve removing a maverick, softening competition, or exchanging information. These collusive concerns in vertical mergers also should not be ignored.

Vertical mergers certainly can lead to efficiencies. But it is important to note that there also are potential barriers to success, including failure to understand the target's business or appreciate its culture. Judge Leon was convinced that the *AT&T/Time Warner* merger would achieve the claimed efficiencies. But it is interesting that both Time Warner and DirecTV (AT&T's satellite distribution entity) had previously been part of vertically integrated firms but then were *dis-integrated*. This Time Warner split off from its distribution entity, Time Warner Cable, in 2009. News Corporation (Fox) acquired a controlling (minority) interest in DirecTV in 2003 but then sold it off in 2006 to Liberty Media (another smaller program owner), which then sold it off to AT&T. history does not indicate substantial vertical merger efficiencies.¹⁸ *Go figure!*

It is also important to credit only efficiency claims that are not actually anticompetitive effects in disguise. For example, suppose that the downstream merger partner wants to gain earlier access to the innovative new products of a potential upstream merger partner, products which currently are made available to all the downstream competitors on an equal basis at the same time. If the upstream firm sells critical input products and the downstream rivals lack equally good substitutes, then earlier access for one firm means delayed access for others. It is not at all clear why this market change would be efficient or benefit consumers.¹⁹

V. HOW SHOULD ELIMINATION OF DOUBLE MARGINALIZATION BE TREATED?

The elimination of double marginalization ("EDM") is generally cited as an inherent efficiency benefit from vertical mergers in oligopoly markets. This is not always the case, because intra-firm supply may not occur. Atalay, Hortaçsu & Syverson find that almost half of the upstream divisions of potentially vertically integrated firms do not provide inputs to their downstream divisions.²⁰ Vertical mergers may offer the potential to achieve efficiency benefits from EDM, but this does not justify a highly permissive enforcement policy that *presumes* large EDM benefits.

First, EDM may not be merger-specific. Coase's point that efficiencies might be achieved *by contract* rather than requiring a vertical merger applies to EDM as well. EDM might be achieved with quantity-forcing, take-or-pay provisions or non-linear pricing contracts. The standard Nash bargaining model typically assumes a lump sum payment in order to maximize joint surplus, not a per unit price. Second, EDM benefits are mitigated when incremental downstream sales are diverted to the downstream merger partner from other downstream customers who purchase inputs from the upstream merger partner.²¹ Third, the downstream merging firm has countervailing incentives to raise its price to drive input sales to its upstream partner.²² Finally, EDM effects may not outweigh the upward pricing pressure from the raising rivals' cost/foreclosure effects, including the Frankenstein Monster, as well as from coordinated effects, or both.

If EDM is merger-specific and otherwise cognizable, it should be credited. But merger-specificity must be proved by the merging parties, not simply assumed. In *AT&T/Time Warner*, it seemed that referring to "bargaining frictions" was considered sufficient evidence that EDM-contracts were not possible. *Poppycock!* Bargaining frictions are ubiquitous, including in merger negotiations. Robert Bork's famous quote might be mirrored here. *If the only justification for EDM being merger-specific is the existence of bargaining frictions, then the agencies would do better by introducing the parties to a contract mediator or arbitrator than by permitting an otherwise anticompetitive merger.*

In *AT&T/Time Warner*, pre-merger prices exceeded variable costs. But that fact alone does not prove merger-specificity absent evidence that the merging firms specifically tried and failed to negotiate an EDM contract. It is possible that MFNs might have prevented a non-merger EDM

¹⁷ Johannes Boehm & Jan Sonntag, Vertical Integration and Foreclosure: Evidence from Production Network Data (Dec. 8, 2018).

¹⁸ In light of their structures and sizes, both of the previous vertically integrated firms would have faced impediments to profitable foreclosure.

¹⁹ The 2016 proposed (and abandoned) *LAM/KLA* merger may have raised this type of issue. *See Lam Research Corp. and KLA-Tencor Corp. Abandon Merger Plans* (DOJ Press Release, October 5 2016). I consulted with a critic of this proposed merger. The recently abandoned acquisition of Gatan by Thermo Fisher also may have raised this type of concern.

²⁰ Enghin Atalay, Ali Hortaçsu, & Chad Syverson, Vertical Integration and Input Flows, 104 Am. Econ. Rev. 1120, 1127 (2014).

²¹ See Moresi & Salop, supra note 15.

²² *Id.*

contract, as suggested by Hovenkamp & Sukhatme²³ and myself.²⁴ But this explanation itself raises two questions. First, AT&T was the largest MVPD programming purchaser and MFNs normally do not constrain the largest buyer. Second, if widespread MFNs systematically would prevent price discounting across the market, then it follows that the MFNs likely are anticompetitive. In that case, they should be enjoined and prohibited by the DOJ and FCC. It makes no sense for an agency to permit an otherwise anticompetitive merger as a work-around for anticompetitive MFNs that the firms voluntarily negotiated.

VI. WHAT PRINCIPLES SHOULD GOVERN APPROPRIATE VERTICAL MERGER POLICY?

My co-authors (Jonathan Baker, Nancy Rose & Fiona Scott Morton) and I recommend that vertical merger enforcement policy satisfy some important principles.²⁵ We recommend that the agencies should not presume that vertical mergers benefit competition on balance in the oligopolistic markets that typically prompt agency review, nor should they set a higher evidentiary standard based on such a presumption. We also recommend that the agencies evaluate claimed efficiencies resulting from vertical mergers as critically as they do for horizontal mergers. The agencies also should require the parties to show that these efficiencies are verifiable, merger-specific, and sufficient to reverse the potential anticompetitive effects. We recommend that the agencies analyze the full range of anticompetitive theories, just as they do for horizontal mergers. This would include paying close attention to potential vertical issues that arise in horizontal mergers.

I should add that these principles also can be applied by the courts in setting the legal standards for vertical mergers. The *27 Scholars* amicus brief to the D.C. Circuit in *AT&T/Time Warner* generally made similar recommendations for judicial analysis.²⁶ These scholars included Herbert Hovenkamp, Joseph Stiglitz, A. Douglas Melamed, and Michael Whinston, among others. This approach is consistent with Section 7, which applies to vertical mergers as well as horizontal mergers. Its overarching "incipiency" standard places additional weight on avoiding false negatives, including under-deterrence. This approach makes sense since merger enforcement is predictive and mergers are permanent. It is well-accepted that oligopolistic markets do not automatically or rapidly self-correct to the achievement of market power, particularly where exclusionary conduct creates or increases entry barriers.²⁷

VII. SHOULD THERE BE SAFE HARBORS AND ANTICOMPETITIVE PRESUMPTIONS?

My co-authors and I also recommend that any safe harbors should be rebuttable and applied only when both markets are unconcentrated. We also recommend that the agencies consider adopting rebuttable anticompetitive presumptions when certain factual predicates are met. I will highlight only one of them here. We recommend that the agencies consider a rebuttable "dominant platform presumption" that would apply to a vertical (or complementary product) merger if at least one of the merging firms is a dominant platform. This presumption in principle might be applied to Google, Facebook, Amazon, and others. The other presumptions are discussed in our longer article.

VIII. CONCLUSIONS

The claim that vertical mergers are invariably efficient and procompetitive is a vestige of outdated economic analysis. Oligopoly, high concentration, and market power are common today, as are technological and network-effects entry barriers. In our modern economy, vertical and complementary product mergers present heightened concerns. Vigorous vertical merger enforcement is necessary to protect a vibrant competitive process, innovation, and consumer welfare.

²³ Erik Hovenkamp & Neel Sukhatme, Vertical Mergers and the MFN Thicket in Television, CPI ANTITRUST CHRONICLE (2018).

²⁴ Steven C. Salop, The AT&T/Time Warner Merger: How Judge Leon Garbled Professor Nash, 6 J. ANTITRUST ENFORCEMENT 459, 468 (2018).

²⁵ Baker et. al., *supra* note 2.

²⁶ For the full list of the 27 scholars, see Brief for 27 Antitrust Scholars as Amici Curiae in Support of Neither Party, United States v. AT&T, No. 18-5214 (D.C. Cir. filed Aug. 13, 2018) (No. 18-5214).

²⁷ Jonathan B. Baker, Taking the Error Out of "Error Cost" Analysis: What's Wrong with Antitrust's Right, 80 ANTITRUST L. J. 1, 17–23 (2015).

AT&T/TIME WARNER AND ANTITRUST POLICY TOWARD VERTICAL MERGERS

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I. INTRODUCTION

Merger control is one of the most central antitrust enforcement missions of the Department of Justice and Federal Trade Commission. Section 7 of the Clayton Act, prohibiting mergers where the effect "may be to substantially lessen competition, or to tend to create a monopoly," is regularly invoked by the agencies to block horizontal mergers that they deem problematic. In contrast, the agencies challenge few vertical mergers, and litigate almost none – the *AT&T/Time Warner* merger was famously the first litigated vertical merger case in over 40 years. As such, the case offers a unique opportunity to assess the criteria that in practice may be applied to such cases when litigated, and also to consider appropriate policy toward such mergers.

II. THE ECONOMICS OF VERTICAL MERGERS

In principle, vertical mergers can have either pro- or anticompetitive effects. The Chicago School emphasized the former, and especially the possibility that a vertical merger could eliminate double marginalization, the elevation of price that occurs when different levels of a chain of production and distribution price in a manner that fails to "internalize" (i.e. take into account) how their pricing decisions affect the profits of other levels. Work in organizational economics – starting with Coase and continuing with the work of Williamson and Grossman-Hart-Moore² – has also emphasized the efficiency effects that vertical integration can generate by reducing haggling and opportunistic "hold up." Notably though, unintegrated ("arms-length") contracting need not be plagued by double marginalization since firms may be able to avoid it with appropriately written arms-length contracts. Likewise, organizational efficiency can actually in some cases be *reduced* by integration (lower initiative by employees vs. owners being one reason; "costs of bureaucracy" being another). So, integration may or may not bring increased efficiency and consumer benefits.

Beginning in the 1980s, economists developed rigorous anticompetitive theories of vertical integration. Most significantly, models emerged showing that an integrated firm may have an incentive to foreclose rivals' access to inputs or distribution or to raise their costs of these items.³ Other models showed that vertical integration might facilitate collusion.⁴ These models answered the Chicago School challenge by showing that anticompetitive effects were a logical possibility.

With rigorous models showing both pro- and anticompetitive effects, the question of whether vertical mergers are likely to cause harm, and in what circumstances, ultimately is an empirical one. As many commentators have noted, there are, to date, relatively few studies that document foreclosure effects, and fewer still that show that such effects reduce consumer welfare. Less well noted is that relatively few studies have documented consumer benefits from vertical integration. While one might think from the writings of some commentators that hundreds of studies have shown such beneficial effects, this conclusion would be wrong. In fact, while elimination of double marginalization is regularly cited as an almost certain benefit of vertical merger, surprisingly little empirical work has documented such effects. Moreover, the work that does exist has focused on a narrow set of industries.⁵

In a recently published paper,⁶ we have studied the effects of vertical integration between cable distributors ("MVPDs") and regional sports networks ("RSNs"), a setting that is attractive for examining the effects of vertical integration because of the importance of RSNs, the variation in vertical integration among them, and the fact that both pro- and anticompetitive effects are plausible in these markets.

Our model allowed us to estimate the extent to which (i) vertical integration leads to internalization of profit effects across divisions, pro-competitively reducing double marginalization and also improving distributors' network carriage decisions; and (ii) vertical integration leads

2 See, e.g. R. Coase, *The Nature of the Firm*, 4 Economica 386 (1937); O. Williamson, The Economic Institutions of Capitalism (New York: The Free Press 1985); O. D. Hart, Firms, Contracts, and Financial Structure (Oxford University Press 1995).

3 See S.C. Salop & D.T. Scheffman, *Raising Rivals' Costs*, 73 Am. Econ. Rev. 267 (1983); J.A. Ordover, S. Salop & G. Saloner, *Equilibrium Vertical Foreclosure*, 80 Am. Econ. Rev. 127 (1990); O.D. Hart & J. Tirole, *Vertical Integration and Market Foreclosure*, 1990 Brookings Papers on Econ. Activity: Microeconomics 205 (1990).

4 V. Nocke & L. White, Do Vertical Mergers Facilitate Upstream Collusion?, 97 Am. Econ. Rev. 1321 (2007).

5 Sam Quinones' book *Dreamland* recounts how a 1980 *Letter to the Editor* in the *New England Journal of Medicine* describing how very few hospitalized patients became addicted to opioids came, over the years, to be cited by proponents of opioid treatment for pain (who most likely had never actually examined the letter itself) as a "an extensive study" and "a landmark report" showing that opioids were quite generally not addictive. A 1986 paper whose author later described it as having "weak, weak data" also became very influential. The cited "fact" that vertical integration should be expected to eliminate double marginalization and generate other efficiency gains sometimes reads in a similar way. We feel that a more nuanced and cautious view is warranted: if it was inexorable that integration enhances efficiency, the Soviet Union would have been the most efficient economy ever.

6 G.S. Crawford, R.S. Lee, M.D. Whinston & A. Yurukoglu, The Welfare Effects of Vertical Integration in Multichannel Television Markets, 86 Econometrica 891 (2018).



to anticompetitive foreclosure of rival distributors, either through complete denial of access to the RSN or through increases in the affiliate fees charged them. Specifically, we introduce and estimate a parameter that measures the share of each dollar of RSN profits that an integrated distributor considers in making its pricing and channel carriage decisions, and also a parameter that measures the degree to which an integrated RSN considers the benefits of rivals' foreclosure reaped by its owned downstream distributors. While economic theory would normally assume that these effects are both fully internalized, we wanted to allow the data to speak and tell us to what extent this is actually the case.

The results provide several key findings. Perhaps most importantly, we find that both anti and pro- competitive effects are present. On the pro-competitive side, we estimate that integrated distributors internalize \$0.79 of every dollar earned by their commonly-owned divisions, providing a force for a substantial elimination of double marginalization and increase in carriage. This estimate is driven primarily by the fact that integrated cable systems in geographic locations relatively distant from teams' home stadiums – where the choice of whether it is worth carrying an RSN showing those teams' games could go either way – are much more likely to carry the RSN than cable systems who do not own the RSN.

On the anticompetitive side, we estimate that an integrated RSN fully, and perhaps more than fully, internalizes the benefits of foreclosure. This finding is driven by the fact that in two cities in which there is a "terrestrial loophole" exemption from the FCC's Program Access Rules that can protect unintegrated rivals (Philadelphia and San Diego), neither satellite distributor had access to the cable-owned RSN despite the fact that our demand estimates indicate that such foreclosure would be unprofitable if the RSN were less than fully accounting for the effects of satellite carriage on profits from its integrated distribution division.

We also are able to examine how these two effects net out for consumer welfare. We find a fair amount of heterogeneity, with some markets showing complete foreclosure and consumer losses from vertical integration at our point estimates. (However, we are not able to statistically reject that the possibility that those individual cases had no consumer harm.) Overall, however, on average across 26 RSNs, we find that there would be a statistically significant positive effect on consumer welfare from vertical integration, despite the incentives for foreclosure that it would create.⁷

Finally, we find that rival distributors are significantly harmed by vertical integration. Sometimes this is because of complete foreclosure, which tends to happen when the cable-owner of the RSN has a large footprint in the local market. Other times it is because the the affiliate fees that rivals have to pay go up. As well, the elimination of double marginalization and increased carriage by the integrated firm further reduces rivals' profits. Since we do not study how these profit reductions might affect rival firms' entry and investment decisions, our welfare analysis is only partial.

In sum, based on our work and reading of the literature, we believe that (i) foreclosure is a real phenomenon that could lead to welfare losses; and (ii) the "jury is still out" on the likelihood of pro vs. anticompetitive effects being the dominant force in the types of markets where vertical mergers are likely to be challenged (or, put differently, on whether there are market characteristics for which consumer harm is reasonably likely to occur, and what those are).⁸

III. THE TRIAL AND APPEAL

The *AT&T/Time Warner* merger case was tried before Judge Richard J. Leon, a George W. Bush appointee. As is well known, Judge Leon found for the defendants, allowing the merger to proceed, and his verdict was upheld on appeal. Judge Leon's ruling was based primarily on two factors.

First, Judge Leon came to doubt that anticompetitive foreclosure was likely to occur as a result of the merger. There were several reasons for this. NBCU executives testified that after their merger with Comcast they had never considered the effect on Comcast profits when negotiating with Comcast's rivals. Similarly, Time Warner executives testified that they too had never considered benefits of foreclosure when Time Warner was integrated with Time Warner Cable. These executives might, of course, not want to admit it even if they were in fact behaving in this way. Their testimony was also directly in conflict with both the usual presumption of within-firm internalization in economic modeling and antitrust law, and also in conflict with the evidence discussed above. Nonetheless, Judge Leon took these executives at their word. AT&T/Time Warner's expert Dennis Carlton also presented regression analysis that he said showed that three previous changes in the extent of vertical integration

⁷ We also find that behavioral conditions that require the integrated RSN to treat rival distributors as the RSN would were the RSN non-integrated would preserve the pro-competitive effects while eliminating the anticompetitive effects. It is an open question to what extent the actual behavioral remedies used in previous cable and satellite vertical mergers were able to achieve this goal.

⁸ The two oft-cited surveys which view the existing evidence as of the mid-2000s as more favorable to efficiency effects than we do, both acknowledge that in particular circumstances vertical mergers may be anticompetitive. See F. Lafontaine & M. Slade, *Vertical Integration and Firm Boundaries: The Evidence*, 45 J. of Econ. Literature 629 (2007); J.C. Cooper, L.M. Froeb, D. O'Brien & M.G. Vita, *Vertical Antitrust Policy as a Problem of Inference*, 23 INT'L J. of INDUS. ORG. 639 (2005).

(including the NBCU/Comcast merger) had not increased prices for integrated channels.⁹ This evidence seemed to be quite important to Judge Leon, reasonably so, and the government never successfully refuted it. Finally, AT&T had offered a remedy that allowed rival distributors continued Turner content access and baseball-style arbitration in the event of a dispute over terms with the merged AT&T/Time Warner. DOJ's expert Carl Shapiro's primary analysis did not consider this factor, and he offered only a limited defense of the proposition that the merger would still be harmful to consumers despite this remedy.

Second, Judge Leon came to doubt the robustness of Shapiro's results. Shapiro used a "Nash bargaining model" to model bargaining between content providers and distributors. This type of model has now been used in a number of economic studies, including our own described above, and has proven effective at explaining pricing in markets in which there are large buyers and sellers who negotiate terms. Anticompetitive effects in Shapiro's bargaining model were driven by the fact that Time Warner's internalization of Comcast's profits would reduce its perceived losses from failure to reach a deal with rival distributors. In Shapiro's model, this change – which reduces Time Warner's desire to reach an agreement with a downstream rival of AT&T's DirectTV service – raises the price that rivals end up having to pay.

Judge Leon's concerns about Shapiro's conclusions from this model were partly based on criticisms leveled by AT&T/Time Warner's lawyers and economic experts of his model's inputs (such as the subscriber loss that would result from a long-term blackout) that they argued could reverse Shapiro's conclusion that the merger would cause consumer harm.

But Leon's concerns also reflected criticisms of the model itself. Noting that blackouts are rare because the gains to both parties from reaching a deal are large, Judge Leon doubted that changes to no-deal payoffs caused by the merger would be salient in these bargaining situations.¹⁰ While Nash bargaining models have been used successfully in a number of settings, including the cable industry, we do believe that more research usefully could be done examining this question.

One clear lesson for antitrust enforcers from these points is the importance of having a model that compellingly reflects factors industry participants consider important, results that are robust to reasonable variations in modeling assumptions and inputs, and compelling evidence about previous mergers or compelling arguments about why studies of previous mergers are either unrepresentative of the current merger, or flawed in other ways.¹¹

IV. ANTITRUST POLICY TOWARD VERTICAL MERGERS

The current version of the *Non-Horizontal Merger Guidelines* is shockingly outdated, reflecting little of the types of concerns that actually arise in reviewing these mergers (such as in the *AT&T/Time Warner* merger). Of course, this raises the question of what these Guidelines, and antitrust policy toward vertical mergers, should be. Some commentators have advocated a very permissive attitude. These commentators typically interpret the literature as robustly showing efficiency benefits of vertical mergers, and rarely if ever showing harm. As noted above, we do not read the literature in this way. Others have advocated a much tougher stance, perhaps with presumptions of harm stated much as in the *Horizontal Merger Guidelines*. Given the current state of knowledge, we feel that such presumptions would be unwarranted at present. Rather, in our view, for vertical mergers in which at least one of the merging firms operates in a market in which producers have market power, courts and agencies would do well to consider carefully both possible pro- and anticompetitive effects, conducting the same kind of intensive fact-based inquiry that is common in horizontal mergers. Doing so would also allow the courts and agencies to gain more experience which, combined with continuing evolution of the economic literature, might in the future indicate the desirability of adopting presumptions or further safe harbors (beyond requiring the presence of either upstream or downstream market power).



⁹ G.S. Ford, *A Retrospective Analysis of Vertical mergers in Multichannel Video Programming Distribution Markets: The Comcast-NBCU Merger*, PHOENIX CENTER POLICY BULLETIN No. 43 (2017), reaches a similar conclusion about the Comcast-NBCU merger using S&P Global's *Market Intelligence* database of average affiliate fees received by channels. Carlton's analysis examined the average affiliate fees in the SNL Kagan database and also the affiliate fees paid by DirectTV.

¹⁰ Judge Leon's doubts were well reflected in his citation of Time Warner CEO Jeff Bewkes' colorful "1000-pound weight" analogy. See *United States v. AT&T, Inc.*, 310 F.Supp.3d 161, 224 n.36 (D.C.C. 2018).

¹¹ Another interesting issue in the case was raised by AT&T/Time Warner's expert Dennis Carlton, who argued that, compared to an average monthly consumer bill of approximately \$140, Shapiro's claimed \$0.27 per month consumer price increase should not be considered "substantial" in the context of Section 7 of the Clayton Act. Time Warner content is a small fraction of available content, but at the same time is unique and Time Warner clearly has some market power (as evidenced by the affiliate fees it commands). Measured relative to those affiliate fees, the price elevation Shapiro predicted was not small: 16.2 percent. By ruling that he did not believe any of the DOJ's claimed anticompetitive effects, Judge Leon did not need to decide this issue. See *id.* at 241.

CAN VERTICAL MERGER ANALYSIS BE SALVAGED AFTER THE AT&T/TIME-WARNER MERGER DECISION?

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I. INTRODUCTION

In the last decade, Post-Chicago economists developed a collection of game-theoretical vertical models. Building on static Nash-Bertrand models of differentiated products, these analyses created a "vertical arithmetic" to balance the upstream and downstream effects on consumer welfare to determine if a vertical merger (or comparable exclusionary tactic) is likely to substantially harm consumers.² A simplified version of this game theoretic model was litigated by the Department of Justice ("DOJ") in the recent *AT&T/Time Warner Inc.* ("*AT&T/TW*") merger.³

The core allegation involved the claim that the merged firm would increase the price of Time Warner's Turner programming channels to multi-video program distributor ("MVPD") competitors of AT&T. In effect, economic theory predicts that *AT&T/TW* would "raise its rival's costs" and injure some consumers. As long as the consumer injury materially exceeds the consumer benefit associated with the vertical merger's efficiencies, the merger could be considered anticompetitive. All the DOJ needed to do was establish the facts necessary to parameterize their exclusion theory and prove the anticompetitive effect. As even a quick reading of the court decision suggests, this did not occur; instead the factual evidence showed that vertical bargaining analysis did not prove competitive injury.⁴ The Appeals Court upheld the district court decision, paying particular attention to the lack of effects evidence supporting a competitive concern.⁵

This paper explores some reasons why the hypothesized bargaining model failed to represent the relevant economic situation. At best, institutional realities suggest that the static bargaining analysis is much more complicated than the simple model envisioned by the DOJ. At worst, dynamic considerations preclude static bargaining analysis, and the merger creates the potential for innovation, while requiring the merged firm to retain existing relationships, in case their innovative products fail the market test. These considerations show how the court's insistence on factual analysis of the merger's likely competitive effect was appropriate.

On the other hand, more traditional vertical analyses focus on evidence of monopoly power and enhancement of barriers to entry to show a clear structural link between the vertical merger and the likely competitive concern. These analyses make use of the standard tools of horizontal merger policy (in a vertical context) and once the facts are collected, infer an anticompetitive effect. Potential examples are presented to illustrate applications of these concepts to internet-based markets.

II. THE VERTICAL BARGAINING MODEL AND THE AT&T/TIME WARNER CASE

The vertical bargaining model is simple. Pre-merger, the upstream firm negotiates contracts with downstream firms that reflect an upstream product price driven by a balancing of the pre-existing bargaining power held by the firms in the vertical arrangement.⁶ As the vertical merger combines the upstream firm with one of the downstream firms, the bargaining position of the merged firm's upstream business with its customers is strengthened. Thus, the price at which the merged firm could profitably refuse a sales contract (i.e. the "threat point") increases. In the world of theoretical economics, this increase in the threat point enhances the integrated firm's bargaining power and thus generates higher prices for the merged firm's upstream product (and injures consumers unless the price effect is negated by efficiencies). Economics has spoken and thus all the merger plaintiff needs to do is justify parameters sufficient to predict a substantial lessening of competition.

Application to the *AT&T/TW* merger appeared straight-forward.⁷ The upstream firm, Time Warner, controlled a wide variety of cable networks valued by downstream distributors, while the downstream firm, AT&T, had a range of distribution assets that could benefit from more exclusive access to Time Warner content. Some evidence existed to show that the content was highly valued, and the AT&T distribution share was material. Thus, the DOJ alleged that the merger was likely to substantially lessen competition by enhancing the combined *AT&T/TW's* post-merg-

2 For a presentation of the modeling structure, see Serge Moresi & Steven Salop, vGUPPI: Scoring Unilateral Pricing Incentives in Vertical Mergers, 79 ANTITRUST L.J. 185 (2013).

3 United States v. AT&T Inc. et al., Case No. 17-2511 (RJL) (D.D.C. June 12, 2018). For a more extensive discussion of the opinion, see Joshua D. Wright & Jan M. Rybnicek, United States v. ATT/Time Warner: A Triumph of Economic Analysis, CPI ANTITRUST CHRONICLE, September (2018), https://www.competitionpolicyinternational.com/united-states-vatttime-warner-a-triumph-of-economic-analysis/.

4 *Id*.

5 United States v. AT&T Inc. et al., Case No. 18-5214 (February 26, 2019).

6 The supplier's threat point is the price at which it would find it more profitable not to sell and the buyer's threat point is the price at which it would find it more profitable not to buy. Bargaining determines a price above the supplier's threat point, but below the buyer's threat point.

7 Previously, the model had been applied in the Comcast/NBC investigation and two European Union cases, thus the application of the model was not novel or unexpected. For a discussion of these vertical cases, see Cristina Caffarra, Gregory S. Crawford & Helen Weeds, *Kabuki Dance or Rube Goldberg Machine, Vertical Analysis of Media Mergers*, CPI ANTITRUST CHRONICLE, August (2018), https://www.competitionpolicyinternational.com/kabuki-dances-or-rube-goldberg-machines-vertical-analyses-of-media-mergers/

er bargaining power, thereby leading to a post-merger price increase for some Time Warner content.8

The district court was not impressed. The court found that the government failed to meet its burden to establish sufficient "case-specific evidence" to prove that the merger was likely to substantially lessen competition.⁹ In making its findings, the court reviewed both "real world objective evidence" (information linked to prior regulatory filings, internal documents, or statements by third party competitors) and expert testimony sponsored by the litigants. As "neither category of evidence was effective in proving the Government's increased-leverage theory," the merger challenge was dismissed.¹⁰ The Appellate court upheld the district court's opinion, taking issue only with a technical detail in the efficiency finding. The court found that the DOJ's bargaining model was considered by the district court and then rejected as factually inapplicable to the relevant market.¹¹ Of particular interest was the defendant's natural experiment evidence that failed to find a price effect for content affected by previous vertical mergers was seen as particularly probative, as was the evidence on the dynamic nature of the market.¹²

To make a long story short, the court rejected the bulk of the DOJ's evidence, even questioning if the 27 cent per month rate increase alleged by the plaintiff would substantially lessen competition.¹³ In particular, the court rejected the "must-have" nature of Time-Warner content, as some MVPDs competed without it, found the evidence supporting the applicability of the bargaining model was insufficient, and observed the customer complaints were speculative in nature (of particular interest, no MVPD admitted it would have to accept higher prices after the merger). The DOJ's expert fared even worse, with (1) the evidence showing a long term blackout was infeasible and (2) the estimates of customer switching in response to a blackout were badly overstated.¹⁴ Moreover, a re-computation of the expert's analysis with more recent margins all but eliminated the competitive concern, and even this analysis would also need to be adjusted to reflect customer contracts.¹⁵

Overall, the evidence clearly showed that the bargaining model, which looked so good in theory, failed in practice. Two economic explanations could be related to the factual problems recorded in the court decision. First, the simple bargaining model envisioned in the DOJ case fails, because it is not linked to the institutional realities of the market. Second, the static analysis of the bargaining problem ignores complexities associated with the dynamic nature of the market, complexities that show the merger is efficient and unlikely to adversely affect the short run competitive process.¹⁶ These issues are discussed in the next two subsections.

A. The Static Bargaining Model

The DOJ's bargaining model implied that the price of programming content depended on the threat points of the interacting firms. As the merger enhanced the bargaining position of AT&T/TW, it increased the threat point of the TW product, and higher content prices and the associated potential for consumer injury were predicted. However, the DOJ seemed to base its threat point analysis on a generic model of vertical distribution for differentiated products, not a model customized to facts associated with the cable industry.

To understand how the competitive process could play out, it is necessary to consider the costs and benefits associated with TW rejecting a carriage offer at their threat point. By refusing to sell to a MVPD, TW gives up the per-subscriber payment and the advertising dollars associated with the foregone viewers who are not recovered by other MVPDs. Offsetting these costs is the ability to monetize some of the value of their now more exclusive content by charging a higher price to competitive MVPDs. Given the nature of carriage contracts, this hypothetical revenue can

9 *Id*. at 59.

10 *Id*. at 74.

11 United States v. AT&T Inc. et al., supra note 5 at 19.

12 Horizontal merger analysis uses natural experiments that predict problematic effects from comparable structural changes as a predictor of an adverse competitive effect. Malcolm B. Coate, *The Use of Natural Experiments in Merger Analysis*, 1 J. ANTITRUST ENFORCEMENT 437 (2013).

13 United States v. AT&T Inc. et al., supra note 3 at 70-71 n.23.

14 *Id.* at 115-16, 118-36.

15 *Id.* at 144, 146-48.

16 This point was formally recognized in the court opinions. United States v. AT&T Inc. et al., supra note 3, at 153-55; United States v. AT&T Inc. et al., supra note 5, at 11.



⁸ The DOJ also alleged the merger would allow (1) AT&T, possibly while coordinating with Comcast, to disadvantage a MVPD that uses IP protocols to deliver programming to consumers or (2) use its control of HBO to prevent competitive MVPD from using access to HBO as a promotional tool when contracting with customers. Both concerns were dismissed by the court after the core bargaining power concern was addressed. *United States v. AT&T Inc. et al., supra* note 3, at 60.

only be recognized as existing contracts expire.¹⁷ However, once Time Warner merges with AT&T, some of the value of this more exclusive content is recovered as soon as customers switch to an AT&T provider to retain valued Time Warner content.

A casual balancing of these costs and benefits suggests that the pre-merger TW threat point was low, as the long run gains seem small in light of the short run losses from foregone distribution. Once the merger is consummated, the TW threat point increases, as additional revenues are recaptured whenever the AT&T MPVD is a rival. As the DOJ analysis implies, the MVPD's threat point does change with the merger, and a simple balancing model based on the two threat points predicts higher post-merger prices.¹⁸

Further thought would suggest that the bargaining model is more complicated, as Most Favored Nations (MFN) clauses are regularly observed in the market. Because these MFN clauses require content providers to pass discounts on to all protected customers, the content provider would have a higher threat point than indicated in the simple analysis.¹⁹ Thus, the introduction of the MFN would allow programmers to impose a higher price in a balancing-based bargaining model.²⁰ However, if TW's MFNs promised discounts to AT&T, then the merger would negate the impact of the AT&T MFN on the pricing of TW content to AT&T's rivals, meaning TW's negotiating power would be reduced after the merger. Although this negative effect would be offset to some degree by the enhancement in bargaining power from the AT&T acquisition as alleged by the DOJ, overall effect of the merger on TW's bargaining power is indeterminate.

Moreover, if the bargaining model was valid, why in the world did Time Warner break up in 2009, spinning off the TW's MVPD business. Had vertical integration increased negotiation power in the cable industry, TW would have remained integrated. To explain both the spinoff and the later vertical merger, the analyst needs to consider a more complex model of bargaining. For example, by committing to keep key TW programming in the most popular tier to maintain subscribers, a MVPD could obtain attractive pricing. As subscribers were relatively stable in the past, negotiations could have involved a lump sum payment, although the contract could retain the illusion of marginal pricing as a risk-sharing device. Today, contracting may be more complex, as subscriber counts seem be difficult to predict over time due to the losses from alternative distribution technologies. Thus, a more integrated structure could now be efficient.

B. Dynamic Competition

It is obvious that technical change associated with the Internet has disrupted the video programming supply chain (defined by the marketing of programming through cable networks (such as HBO, ESPN, or TNT) to multi-video program distributors (such as Comcast or AT&T's DirecTV-satellite)). As download speeds and Internet Service Provider ("ISP") bandwidth have increased, it became possible for Internet-based cable distributors (such as SlingTV or DirecTV-Now) to create smaller bundles of cable networks and deliver the content via an Internet connection at a lower price than traditional MVPD services. Once cable programming service is provided via the Internet, the customer can view the content on television, personal computers, tablets, or even cell phones. Cable companies compete by offering immediate access to selected programming at any time and web-based services to provide access to specific programming on other devices.

Potential for even more significant change is related to the concept of subscription video on demand, a product pioneered by firms such as Netflix, Hulu (On-Demand), and Amazon. Such offerings have led some consumers to do without programming networks, effectively going back to the 1960's for "Over the Air" television, supplemented with subscription services. Direct to consumer sales have created an incentive for programmers to offer their content via video on demand (VOD) (dispensing with the programming network).²¹ This service could be supplemented with advertiser supported programming networks for time sensitive programming. By establishing a personal relationship with the customer, the

17 The more exclusive nature of TW content makes it more valuable to rival MVPD, because carriage of TW allows the rival entity to pick up subscribers from the MVPD that now lacks TW content.

18 Even if a static negotiation model was appropriate, a number of other bargaining models could be considered. For example, one could start with the current price and focus on the ratings of TW content, the success of the promotions offered by the MVPD to build ratings that then increase ancillary advertising revenue, or the prices paid in recent renegotiations by other MVPD for similar TW content. Threat points may have little relevance, because negotiations may never address prices close to either threat point. Without an ability to justify one model as more realistic than another, empirical evidence seems required.

19 In particular, a discount to one TW customer must be passed on to all other (protected) customers, a situation that implies the opportunity cost of a price cut is higher than otherwise and this opportunity cost would decline after the merger, if ATT is one of the protected customers.

20 However, MFN's are demanded by customers, and thus it seems unlikely that the customers would push for an institutional structure that would raise their long run prices. For a discussion focused on MFNs on cable television, see Erik Hovenkamp & Neel Sukhatme, *Vertical Mergers and the MFN Thicket in Cable Television*, CPI ANTITRUST CHRONICLE August (2018), https://www.competitionpolicyinternational.com/wp-content/uploads/2018/08/CPI-Hovenkamp-Sukhatme.pdf.

21 Two developments seem material. First, VOD transforms the programming business from its traditional schedule model to a content model. Second, the demise of the cable bundle may lead to the commoditization of content, cooking the goose that has laid the golden eggs. Time sensitive content, especially sports, may become even unique and end up as a focus of antitrust. For an interesting read, see *United States v. NFL* 116 F Supp. 319 (E. D. Pa. 1953).

programmer/distributor could also offer more efficient advertising services, services that might have include more valuable customer information than the current targeted advertising products provided by duopolists of Google and Facebook.²²

As TW has the content and AT&T has current customer relationships, cooperation to develop direct-to-consumer services seems to be a profitable undertaking. A merger might be necessary if the firms do not feel they can achieve the efficiencies of vertical integration with a complex contract. As consumers benefit from the entry of new products (both from consuming the innovative product and from the downward pressure on the prices of rival products), such a merger would seem efficient, and without clear evidence of substantial short run harm to competition, such a vertical merger should be allowed.

Dynamic competition issues also offer some insights into the short run. As the combined AT&T/TW business would not know if their innovative distribution techniques would be successful in significantly changing their business model, it would appear necessary for the merged firm to maintain supportive relationships with both other programmers and competitive MVPDs.²³ Cable programmers and MVPDs have a number of potential competitive responses to the new environment. For example, it might be possible to customize advertising to consumers watching a program with the MVPD's "On-Demand" service. Likewise, programmers could be more willing to allow MVPDs to organize additional product tiers to better compete with OTT distributors. Overall, long run considerations imply that programmers and MVPDs may see themselves as partners. Thus, the zero-sum, win-loss structure of the DOJ's static bargaining game may be inapplicable.

As a bottom line, the bargaining process may be exogenously constrained by market realities, with most structural changes in the vertical relationships having minimal, if any, adverse effects on bargaining power under either a more general static or an innovation-based dynamic model. Moreover, the dynamic discussion seems to highlight the desire to compete more aggressively in the future as the strategic reason for the merger. By reorganizing some of the assets competing in the video programming marketplace, the combined AT&T/TW may be able to lower the costs of future investments and grow into a more aggressive rival.²⁴ This discussion, coupled with the court's extensive review of the facts, suggests that models highlighting marginal changes in bargaining power are likely to prove very difficult to substantiate in court.

III. VERTICAL MERGERS IN LIGHT OF THE AT&T/TIME WARNER DECISION

As with all Post-Chicago analyses, bargaining models define possibility theories which describe what might happen, not what will happen.²⁵ Thus, Post-Chicago models require close study to determine if their key assumptions represent the competitive process under review, detailed analysis to parameterize the key equations, and at least some evidence to confirm the predictions of the model, unless clearly substantiated by industry facts. As shown in the *AT&T/TW* case, these are daunting tasks, raising the question of whether vertical enforcement has much of a future.

All of these concerns can be minimized by returning to traditional vertical models focused primarily on how entry conditions enhance monopoly power, using only a few parameters that can be substantiated with available evidence.²⁶ The most straight-forward vertical analysis starts by identifying preexisting monopoly power and then shows how the merger (or comparable exclusionary tactics) protects or enhances monopoly power.²⁷ These models have the advantage of simplicity, with the anticompetitive effect defined by the core problematic behavior. As the concepts of monopoly power and barriers to entry are standard antitrust concerns linked to a generalizing monopoly theory, the evidentiary burden is much lower, as proof of monopoly power coupled with evidence on the enhancement of barriers to entry is likely to show injury to the competitive process, unless the effect is negated by substantial efficiency evidence. In these cases, the defendant now has the problem of proving efficiencies to prevail.

27 Here, monopoly power describes the ability of a single firm to set short run price (or other performance variable) without reference to the strategic behavior of rivals.



²² Advantages of vertical integration in cable are discussed in the District court opinion, United States v. AT&T Inc. et al., supra note 3, at 18-28.

²³ Current internet cable and subscription TV products benefit from the relatively fixed charge for ISP services. If ISP's change their pricing formula to charge based on material uploaded and downloaded, cable television service might become more attractive.

²⁴ Netflix's capitalization of around 150 billion dollars for simply distributing content on the web seems to suggest that profitable opportunities exist in the niche.

²⁵ See Franklin M. Fisher, *Games Economists Play: A Noncooperative View*, 20 RAND J. ECON. 113(1989); Sam Peltzman, *The Handbook of Industrial Organization: A Review Article*, 99 J. POLIT. ECON. 201 (1991). For a more recent discussion, see Malcolm B. Coate & Jeffrey H. Fischer, *Daubert, Science and Modern Game Theory: Implications for Merger Analysis*, 20 SUPREME COURT ECON. REV. 125 (2012).

²⁶ The 1982 Merger Guidelines note a vertical merger is problematic if it enhances entry barriers by requiring two stage entry. Slight generalizations of this concern cover situations in which the vertical merger eliminates a nascent threat that had a chance to overcome existing barriers to entry or enables the extension of monopoly power to another market with stronger barriers to entry. U.S. DOJ, *1982 Merger Guidelines*, 47 Fed. Reg. 28, 493 (1982).

To fix the basic idea for the cable industry, consider a hypothetical merger affecting MVPD competition in a large city during the 1990's. Consider two competing local distributors of cable programming, one large franchised MVPD and the other a small over-builder, just entering the market. Assume the community had a single Regional Sports Network (RSN) that sold a premium product, not included in the basic cable tier. The acquisition of the RSN by the large cable distributor would raise vertical concerns associated with the exclusion of the small MVPD from access to the sports network, an action that might entrench (i.e. build barriers to entry and expansion to protect the dominant MVPD).

Of particular interest is the threat to the large MVPD's monopoly power caused by the entrant. If the entrant is marginalized or totally excluded, the incumbent MVPD protects its monopoly power into the future, creating a consumer welfare loss. Even if the success of the excluded entrant would be uncertain, the expected value of the consumer loss may still be substantial, supporting a vertical concern.²⁸

Two effects are relevant. First, the merged firm would sacrifice the gross margin (unit profit contribution multiplied by the number of lost customers) for its sports programming business by refusing to sell the service to the small rival. Offsetting that effect is the gross margin associated with fraction of the small rival's customers that divert to the cable firm to retain access to the sports programming.²⁹ Although more content customers are lost than gained, the margin on new cable sales may substantially exceed the margin lost on the sale of sports programming through the small rival. The exclusion tactic is profitable if the additional profit (total margin) on cable distribution sales outweighs the lost profit on the (now lower) sports programming sales.³⁰ Profitable exclusion injures consumers, as both the customers who remain with the fringe firm but loose the sports service (saving the cash that they value less than the lost sports content) and the customers that switch to cable (possibly paying the same price, but preferring the differentiation implicit in their original MVPD service).³¹ This exclusion seems more likely to occur (be more profitable) the larger MVPD margin, the smaller the RSN margin, and the more willing customers are to switch to (or remain with) the dominant cable supplier.

Note in contrast to *AT&T/TW*, the antitrust modeling is now reduced to a simple analysis, based on a relatively few key parameters. These models seem particularly relevant to network markets. By using vertical mergers (or other exclusionary tactics) to either defend its entrenched position or move its monopoly power to a related and more defensible market, the network monopolist can extend its monopoly power over time. This theory, broadly interpreted, seems useful in controlling monopoly power on the web, without the need to impose any new antitrust regulations. A few illustrations are presented below, along with some potential concerns linked to the current competitive conditions on the Internet.

IV. VERTICAL RELATIONSHIPS AFFECTING PLATFORM MARKETS

Vertical concerns associated with platform markets were recognized in computer-related industries once the markets started to mature and the expected long run competition for the platform failed to materialize due to the evolution of substantial barriers to entry that entrenched incumbent platform owners.³² This observation suggests that discussion of platform competition must first classify the platform by the type of barrier to facilitate the required vertical analysis. Five classifications are of immediate interest: operating system networks (e.g. Windows, Linux, and Android) with their application barrier; communications networks (e.g. e-mail, chat (messaging), Facebook/Instagram) with their installed customer base barrier; informational networks (e.g. Google, Angie's List) with their scale economy barrier; distribution networks (e.g. Amazon) with their distributional scale barrier; and Market Making (e.g. Uber, Etsy) with their service provider installed base barrier.³³

Moreover, the analysis must follow the money and understand how the network is monetized. One approach is to sell complementary software (e.g. Windows/Office) another is to charge users for access the platform (e.g. Amazon/third party sellers, Apple's IOS/Aps, and various

28 An expected value analysis would focus on the competitive effects of an enforcement policy, weighting each by its probability of occurrence. If the procompetitive effect of a challenge is large enough, the action could significantly benefit competition even if the probability of occurrence is not large (assuming minimal efficiency effects). This concept seems implicit in a nascent threat analysis and may apply to other situations.

29 As the MVPD's margin covered their entire basic cable portfolio, those earnings could substantially exceed the margin from selling a sports network.

30 To the extent that the double marginalization problem was not contracted around, the benefits from eliminating that effect would also need to be addressed.

31 Possibly, a few customers drop all cable programming and are also injured.

32 Numerous early examples of platform replacement were observed, generating an expectation of a continued competition for the platform standard with the existing standard being creatively destroyed by innovation. For example, IBM's leadership position in operating systems was overcome by Microsoft, as Windows crushed OS-2. Application software giants WordPerfect and Lotus also met their demise, displaced by Word and Excel. America OnLine was marginalized by independent Internet Service Providers and Myspace was replaced by Facebook to note the better-known examples. However, as these technology markets matured, platform barriers seemed to protect incumbent standards from competition.

33 It is beyond the scope of this note to list all potential network classifications or address the relationships within these classifications. The goal is just to focus the competitive analysis on the barrier that limits competition once the platform is established.





market makers), a third approach sells advertising (e.g. Google, Facebook, Twitter) and a fourth integrates on one side of the platform to sell direct to consumers (e.g. Amazon, Walmart). Although vertical monopolization concerns focus on strategies employed to enhance monopoly through the promotion of barriers to entry, the details likely depend on the monetization model applied.³⁴

In the text below, two examples of vertical concerns that focus on historical concerns of monopoly maintenance (Microsoft's operating system) and monopoly extension (AOL Instant Messenger) are given. This discussion is followed with hypothetical concerns that may link existing network monopoly power (Google's search engine and Amazon's distribution business) to some type of problematic conduct. In light of the limited public information on these latter two concerns, the discussions are for expository purposes only.

A vertical concern sat at the core of the infamous Microsoft case, with the idea that Microsoft crushed (downstream application) Netscape (and to a lesser degree, Java) to prevent those products from developing into middle-ware platforms competitive with the Windows monopoly.³⁵ Had Microsoft filed to buy Netscape, a vertical merger analysis would almost mirror the merits of the monopolization case. As it is next to impossible to prove efficiencies sufficient to negate a monopoly count (here monopoly maintenance) it simply is not credible to argue the outcome of vertical merger litigation would have allowed Microsoft to close the deal.³⁶ Given the magnitude of the benefit associated with increased operating system competition, the protection of the nascent threat from Netscape (and Java) proved to be sufficient to justify the monopolization case. In effect, an expected value analysis implied the monopolization tactic did (and the hypothetical vertical merger would have) substantially reduced competition.

Another vertical theory involves monopoly extension, as an exclusionary tactic that allows a firm to extend its monopoly power from a current market (threatened by future entry), to a related market relatively immune to future entry and adversely affect the dynamic competitive process. The fact situation involves technical exclusion on the part of America Online ("AOL") to prevent competitive instant messaging ("IM") products from communicating with AOL's Instant Messenger software ("AIM").³⁷ Here, the issue was AOL using existing monopoly power in internet services to establish a future dominant position in IM services, a position that could survive the demise of AOL's core ISP business in the impending broad-band regime shift. If the AIM service could (1) be protected from interoperability (other than with AOL's ICQ web-based product), and (2) develop an extensive base of users, while operating under the protection of the AOL's ISP monopoly power, the IM service may have become a monopoly communication tool. AOL's attempt to protect their IM product from interoperability was eventually blocked by the Federal Communications Commission as a condition for the *Time Warner/AOL* merger.³⁸ Had Time Warner not launched this ill-fated acquisition, AOL may have been able to continue its policy of updating their IM software to technically exclude all attempts by rival IM providers to achieve inter-operability and control chat given their first mover installed base advantage.³⁹ Although this analysis may not show the exclusion was relatively likely to succeed, an expected value analysis of the benefit could be used to condemn the actions, due to the potential to create a dominant communication tool, one that could have evolved into a powerful monopoly like Facebook.

Other examples of potentially problematic vertical mergers (or vertical exclusion) can be based on more recent competitive situations. For example, Google bought a leading advertising support firm, Double Click.⁴⁰ This merger may have been helpful to the monetization model that entrenched Google as the dominant search engine (due to its pricing success in targeted advertising). If the vertical merger materially facilitated Google's big data strategy to collect and monetize huge amounts of user information, one could claim that the transaction enhanced the barriers

37 Technical exclusion involves "updating" software to prevent interactions with rival products for the purpose of adversely affecting the competitive process.



³⁴ Three vertical entry models appear most relevant (forcing two-stage entry on the market, monopoly maintenance, and monopoly extension).

³⁵ For a more detailed discussion see Malcolm B. Coate, *An Algorithm for Analysis of Vertical Concerns*, CPI ANTITRUST CHRONICLE, August (2018), https://www.competitionpolicy-international.com/an-algorithm-for-analysis-of-vertical-concerns/, along with referenced work.

³⁶ In an interesting irony, Google may be using exclusionary tactics to exclude the Microsoft and Firefox browsers. For an interesting read, see *Did Google Sabotage Firefox and IE? (zdnet.com)*, SLASHDOT.COM, April 21, 2019, https://news.slashdot.org/story/19/04/20/0234249/did-google-sabotage-firefox-and-ie, and the articles cited within.

³⁸ FCC, Fact Sheet: FCC's Conditioned Approval of AOL-Time Warner Merger (2001), https://transition.fcc.gov/Bureaus/Cable/Public_Notices/2001/fcc01011_fact.pdf.

³⁹ Communications products seem particularly prone to maintaining monopoly power, as consumers need to be on the network to communicate. This observation seems to explain the dominant positions of both Facebook and Instagram in what appear to be age related sectors of social media. The often-ridiculed statement "you didn't build this," appears insightful when applied to large Internet communications networks. The firm writes code, but the network of individual users build the business. As for May 5, 2019, Facebook had a market equity of over a half a trillion dollars.

⁴⁰ For an alternative view, see Dan Bitton, David Pearl, Maurits Dolmans & Henry Mostyn, *Competition in Display Ad Technology: A Retrospective Look at Google/Doubleclick and Google/Admob*, CPI ANTITRUST CHRONICLE, April (2019). https://www.competitionpolicyinternational.com/competition-in-display-ad-technology-a-retrospective-look-at-google-doubleclick-and-google-admob/. Although the authors note competitive options remains in the industry, this observation does not address the potential for serious antitrust concerns within relevant markets that cover portions of the advertising industry.

to entry into Google's core market by enabling additional economies of scale in targeted advertising.⁴¹ Had the two firms remained independent, Double Click could have developed big data implementation programs that was useful to a much wider audience of content providers. A detailed discussion of this potential concern is beyond the scope of this paper, but Google's behavior and market position seems compatible with the concern.⁴² Again, expected value analysis controls, as the unexpected rise of Facebook as a big data competitor seems to have come as a surprise to all.⁴³

Finally, Amazon's business model contains interesting vertical relationships, but the facts are buried in the specific business-to-business relationships, limiting the usefulness of public information to the discussion.⁴⁴ Kahn observes distribution economies of scale that seem to establish Amazon's monopoly power in on-line retailing.⁴⁵ Economies of scope have enabled some direct competition from Walmart and a near infinite number of smaller firms.

Amazon benefits from distribution contracts with a very large number of small third-party partners, many of which seem to also sell on their own web sites and possibly through other distributors. Exactly what vertical constraints Amazon imposes on these partners is unclear, as is the interpretation of Amazon's willingness to compete directly against their third party partners, a consideration noted by Khan.⁴⁶ To the extent that the retailing contracts coupled with the subtle threat to compete directly with the retailer, precludes aggressive multi-homing competition on the part of small retailers, the arrangement may serve to maintain the economies of scale that protect Amazon's market position. As even a limited examination of Amazon filled an entire law journal article, any detailed exposition of an exclusionary concern is beyond the scope of this paper.⁴⁷ However, it is clear that the protection of even a nascent threat to the existing monopoly power held by Amazon is an important antitrust concern.

The key takeaway from this discussion is the importance of vertical merger analysis to focus on discrete anticompetitive conduct associated with creating or expanding barriers to entry.⁴⁸ Left unaddressed (until now) is the need to identify monopoly power held by the incumbent platform. For Microsoft and AOL, the monopoly power would be inferred from their share in the operating system and ISP markets, respectively. Google and Amazon also seem susceptible to a share analysis. These types of analysis have no need for the complex bargaining models studied and rejected in *AT&T/TW*.

Of course, evidence on poor performance would be preferable to share-based inference of a competitive concern. For example, Google is alleged to read customer's email and use that information in their targeted advertising,⁴⁹ and Facebook's privacy issues are common knowl-

42 The exact market share of Google-related big data advertising is difficult to measure from public information. However, together with Facebook, the two firms control over 60 percent of digital advertising. See Felix Richter, *Amazon Challenges Ad Duopoly*, STATISTA, February 21, 2019, https://www.statista.com/chart/17109/us-digital-advertising-market-share/.

43 Moreover, the duopoly structure of the big data market is hardly competitive and potential entry into the niche from the likes of AT&T/Time Warner and Comcast do not seem sufficient to negate the concerns.

44 For an extensive discussion of Amazon's operations, see Lina M. Khan, Amazon Antitrust Paradox, 126 YALE L.J. 710 (2017).

45 Kahn observes Amazon's billion-dollar distribution infrastructure, a comment suggestive of impediment to entry. *Id.* at 714 n.13. Critics would suggest on-line retailing competes with bricks and mortar retailing, negating any inference of monopoly power. Although a detailed antitrust review could sustain a broad market, a narrow market is also a potential outcome of a factual analysis.

46 *Id.* at 782-83. Moreover, Khan details a situation in which Amazon cloned the business model of a large third-party seller, marginalized their business, and eventually bought them out. *Id.* at 768-70.

47 *Id.* Interestingly, one point of Kahn's paper was that Chicago-based antitrust could not address the Amazon problem. Although stand-alone predation concerns are difficult to prove, vertical concerns are readily actionable under mainstream antitrust law. See *United States. v. Dentsply Int'l, Inc.*, 399 F. 3d 181 (3rd Cir. 2005). Resource allocation may be a more reasonable explanation for the lack of active enforcement, as substantial resources are required for merger policy to oversee the market for corporate control, protect the efficiency of the stock market and preserve the value of the America's 401-K retirement plans. Until recently, the potential for web-related problems was not well recognized.

48 Another example involves Facebook's acquisition of Instagram. See Coate, *supra* note 35, for a discussion. Going forward, integration of WhatsApp directly into Facebook and Instagram could raise concerns comparable to the AOL/AIM situation discussed above (although no clear threat to the Facebook monopoly power exists today). In reviewing the Facebook/WhatsApp merger, the EU appeared to focus more on WhatsApp's potential to evolve into a social media competitor. More recently, the EU found Facebook's disclosures to be incomplete and imposed a fine. See COMP/M.8228, *Facebook/Whatsapp*, May 17, 2017, http://ec.europa.eu/competition/mergers/cases/decisions/m8228_493_3.pdf.

49 Although the exact details are not clear, Google appears to read customer email and offer that ability to third parties under certain circumstances. See Shannon Liao, *Gmail app developers have been reading your emails*, THEVERGE, July 2, 2018, https://www.theverge.com/2018/7/2/17527972/gmail-app-developers-full-email-access.

⁴¹ In effect, the merger may have transformed the market to require into both search and sophisticated advertising design and placement, an action identified as problematic in the 1982 Merger Guidelines. *1982 Merger Guidelines, supra* note 26. To offer another example, Google's acquisition of YouTube could raise a monopoly maintenance concern, as YouTube requires a search engine to review the massive installed base of videos, and if combined with a smaller search rival could have also represented a competitive threat to Google's search business.

edge.⁵⁰ Both considerations suggest that these firms take a monopoly level of information from consumers. Similarly, a surprising number of Internet firms exclude customers for what appear to be political reasons. Such alienation of a customer class seems incompatible with a competitive equilibrium in which firms welcome all (legal) customers as needed to thrive in a competitive environment.⁵¹ Additional evidence on the lack of competition within various platform markets could very well exist within the firm's internal documents.

V. CONCLUSION

The *AT&T/Time Warner* merger litigation illustrates the problems with the application of a game theoretic model. As game theoretic models define what might happen, not what will happen, the analyst should provide extensive evidence to show the model is applicable and then, often, effects evidence to confirm the model's prediction. In contrast, monopoly-based vertical models generally require evidence of monopoly power and a credible theory of how the monopoly power can be exploited to restrict competition over a substantial amount of commerce. Both considerations seem manageable, especially when it is realized that large potential anticompetitive effects are material in an expected value sense, without the need to establish a high probability of concern. Although obtaining the evidence for vertical litigation against Internet monopolies is likely to be hard work, well established vertical theories certainly exist to guide the investigation.⁵²

50 Facebook users seem to face what could be colorfully described as an informational colonoscopy.

⁵¹ The concept of X-efficiency introduces another potential cost of monopoly as the relaxation of competition implies firms will not need to aggressively reduce costs and thus X-efficiency may be lower in monopolized production processes. In effect, managers choose an easy life over the hard work of cost minimization. See Harvey Leibenstein, *Allocative Efficiency vs "X-Efficiency,"* 56 Am. Econ. Rev. 392 (1966). Refusing to do business with customers based on their political orientation seems to be a classic example of such behavior, as managers act on their political beliefs and fail to optimize profits for shareholders.

⁵² If the competitive problems turn out to be impossible to address with antitrust, natural monopoly regulation may be needed. One possible idea is the requirement for basic interoperability within monopoly communication networks. For example, this would allow customers to leave Facebook for services from new entrants, but retain access to material associated with their friends and family who remain with Facebook. In effect, the core of Facebook could be opened up to competitive services, diminishing Facebook's monopoly power.

THE LAW DEFICIT IN MERGER CASES

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There is a law deficit in American merger cases. Both courts in *AT&T/Time Warner* noted it. As the D.C. Circuit put it, "There is a dearth of modern judicial precedent on vertical mergers." This is especially problematic because, as Judge Rogers noted in the same sentence, there is also "a multiplicity of contemporary viewpoints about how they might optimally be adjudicated and enforced."² The Supreme Court decided its last vertical merger case in 1972,³ and the last case in any circuit came in 1987 in a case by a private plaintiff.⁴ *AT&T* was the first vertical case brought by the Justice Department in literally four decades, and the FTC has yet to challenge one in court in modern times. Unfortunately, *AT&T* made no new law. The trial judge held only that the Department had failed to establish the factual predicates for any of its three theories of anticompetitive harm. On appeal, the Department could assert only that the findings on its primary theory were clearly erroneous. The D.C. Circuit held that they were not.⁵ Neither court considered whether the Department's theory was valid as a matter of law and, if so, what its elements were nor how they might be established.

The future of serious vertical merger enforcement turns on the answers to these and a host of other questions. Most importantly, must the agencies attempt the same fact intensive showing of likely effects as the Department attempted in *AT&T*? Or can they persuade the courts to accept something more like the *Philadelphia Bank* structural presumption that it still employs to great effect in horizontal merger cases? The most important lesson from *AT&T* is that the agencies are not likely to win many cases if they cannot. The welfare effects of even the largest vertical mergers are ambiguous. Worse, the theories of harm from vertical mergers only show that harm is possible under certain circumstances, but not whether it will actually occur. The same conditions necessary for the raising rivals' cost ("RRC") theory urged in *AT&T*, for example, also support the elimination of double marginalization ("EDM") cited by defendants. Indeed, Carl Shapiro, the government's expert, found both effects in *AT&T*. Quantifying these effects in dollars per annum with any acceptable degree of accuracy, as Dr. Shapiro attempted, proved extremely difficult.⁶ Having to bear the ultimate burden of persuasion, vertical cases will be hard for the agencies to win on this theory of harm.

They will also be very expensive and time consuming, as this case illustrates. Even with expedited treatment, the investigation and litigation took over two years. Judge Leon estimated the cost of the case to be "easily in the tens of millions of dollars."⁷ This estimate may or may not be accurate, but costs of this magnitude are a serious problem for the agencies in view of their limited resources. The whole point of the *Philadelphia Bank* presumption was to avoid these impediments to effective enforcement, as urged by Derk Bok's famous article,⁸ on which Justice Brennan relied in his opinion for the Court.⁹

Unfortunately for the agencies and other proponents of enhanced vertical merger enforcement, there is no equivalent consensus to support a presumption against vertical mergers. Everyone agrees, of course, that vertical integration is efficient in a host of ways, as all economic integration is. In the words of the casebook I use, there are "*literally hundreds of ways* that firms can lower their costs or provide better service by integrating vertically."¹⁰

But there is no similar consensus as to whether they cause significant harms justifying more cases like *AT&T*. To use the raising rivals' costs theory urged in *AT&T* as just one example, it is not easy to estimate whether and, if so, how much a newly integrated company can increase its selling cost due to the increased bargaining leverage it obtains. Nor will it be easy to determine how much, if any, of the increased cost to the seller can be passed on to its customers. After all, the proponents of the RRC theory also argue that EDM can be achieved through contracts which in effect split the optimal markup for the final product between the supplier and buyer. Both have the incentive to make such a deal. The key impediment, however, is the split of the surplus created between the parties. The fact that Comcast, for example, may now have to give AT&T a bigger cut of the profit from the distribution of Time Warner content does not mean that the overall margin is higher, just that Comcast now gets less of it. This is only an injury to a competitor, not to competition, and thus no reason to prevent the merger.

5I agree for the reasons stated in Joshua D. Wright & Jan M. Rybnicek, United States v. AT&T/Time Warner: A Triumph of Economic Analysis, 6 J. ANTITRUST ENFORCEMENT 469 (2018).

6 United States v. AT&T, 310 F. Supp.3d 161, 225-40 (D.D.C. 2018).

7 *Id.* at 253.

² United States v. AT&T, No. 18-5214 (D.C. Cir. Feb. 26., 2019), slip op. at 15.

³ Ford Motor Co. v. United States, 405 U.S. 562 (1972).

⁴ Alberta Gas Chems. v. E.I. du Pont de Nemours, 826 F.2d 1235 (3d Cir. 1987), cert. denied, 486 U.S. 1059 (1988). The last court of appeals case with an agency plaintiff was Fruehauf Corp. v. FTC, 603 F.2d 345 (2d Cir. 1979).

⁸ Derek Bok, Section 7 of the Clayton Act and the Merging of Law and Economics, 74 HARVARD L. REV. 226 (1960).

⁹ United States v. Philadelphia, National Bank, 374 U.S. 321, 362 (1963).

¹⁰ E. THOMAS SULLIVAN et al., ANTITRUST LAW, POLICY, AND PROCEDURE: CASES, MATERIALS, PROBLEMS 845 (7th ed. 2014) (emphasis added).

There are, of course, other theories of anticompetitive harm from vertical mergers, including the original foreclosure theory of the old Supreme Court cases and the ones in the obsolete 1984 Guidelines. But we still have no useable judicial guidance as to whether these theories continue to justify condemnation under Section 7 and under what conditions.

In particular, we need judicial consideration, preferably from the Supreme Court, on two issues. The first is how to deal with the efficiencies from vertical mergers. The grudging approach to efficiencies in horizontal merger cases makes the supposed "efficiency defense" virtually useless in litigation and reflects a profound misunderstanding of the real world of business. Gains from acquisitions are not "sure things" that can be proved to the dollar. All too often, they are predictions that make sense at the time but unfortunately don't pan out. Uncertainty and risk are integral aspects of business.

The second issue is how to assess markets that are in the midst of rapid change. Both courts in *AT&T* observed the rapid displacement of cable TV by streaming services and by companies like Netflix, Hulu, and Amazon. In such markets, supposedly dominant positions can evaporate quickly. Just ask Blockbuster. AT&T's stated motivation for the deal, to further its data transmission business by encouraging the streaming of video content to its 100 million cellular customers, is highly credible. But the Government's case ignored this obvious motivation, although both Judge Leon and Judge Rogers cited it as a further reason for doubting Professor Shapiro's quantitative model. Certainly, rapidly changing markets pose problems for the static models we typically employ in all of antitrust. This is particularly true with merger cases under Section 7, where prediction is the name of the game.

In my opinion, the present state of knowledge justifies the opposite of *Philadelphia Bank*, a presumption *in favor* of vertical mergers. The plaintiffs should have the burden of demonstrating the likelihood of actual and substantial anticompetitive effects. Whether any lower court would consider such a presumption is questionable. Ultimately, only the Supreme Court can and should frame the basic rules for vertical mergers.

The situation is only marginally better for horizontal mergers. There are a decent number of district court decisions, but only a handful from the courts of appeals, especially outside the D.C. Circuit, and no modern Supreme Court decisions to provide uniformity among the circuits. Very few district court opinions are even appealed. As a result, there is not a lot of controlling precedent even within circuits. The Court's last horizontal merger case was *General Dynamics*, which left many questions unanswered. Without further guidance from the Court, the lower courts answered them, reading *General Dynamics* broadly to support a variety of ways to rebut the *Philadelphia Bank* presumption. Some commentators argue that these cases have gone too far,¹¹ while others would abolish the structural presumption altogether.¹² The Supreme Court should decide this fundamental issue.

We need the Court to address other fundamental merger questions. Apart from the continued role of the structural presumption, the most important is the validity of the hypothetical monopolist method methodology for defining relevant markets. The great virtue of the methodology is that it provides a common market power standard for market definition in lieu of the ad hoc decisions finding markets as broad as flexible packaging and as narrow as frozen dessert pies. But the standard itself, the small but significant nontransitory increase in price ("SSNIP"), is problematical. The ability to raise price 5 percent for one year is hardly the substantial market power of a real monopolist. By contrast, Microsoft was able to price an upgrade to Windows 98 at \$89, even though it could have made a profit at \$49.¹³ The standard should not require that degree of market power, but it should be a substantial amount. By its own terms, the SSNIP test requires only the power to impose "small" price increases, and then for only a short time. It produces unduly narrow markets, just as the submarkets created in *Brown Shoe* do.

The Court needs to address the related concept of unilateral effects, which now accounts for "the clear majority of merger investigations."¹⁴ The original unilateral effect of concern to antitrust was monopoly pricing, not SSNIPs. The market power that every producer of a differentiated product possesses had not previously been the subject of antitrust scrutiny. To be sure, if all else is equal, why not go after even small price increases. But all else may not be equal. Product differentiation provides consumers with more choices and better products, often ones not previously available. Successful differentiations can be copied quickly, especially by larger firms in the same overall market. This is exactly what happened with office superstores. The 1997 *Staples* decision is the poster child for unilateral effects. Yet the really large big box stores, Target, Walmart, Costco and Sam's Club, soon responded by increasing their office supply offerings. And, of course, Amazon carries them, too. So how much good did the *Staples* case really accomplish?

14 Hovenkamp & Shapiro, supra note 11, at 2014.

¹¹ See, e.g. Herbert Hovenkamp & Carl Shapiro, Horizontal Mergers, Market Structures, and Burdens of Proof, 127 Yale L.J. 1996, 2010-11 (2018); Peter C. Carstensen, The Philadelphia National Bank Presumption: Merger Analysis in an Uncertain World, 80 ANTITRUST L.J. 219, 236 (2015).

¹² Douglas H. Ginsburg & Joshua D. Wright, Philadelphia National Bank: Bad Economics, Bad Law, Good Riddance, 80 Anttrust L.J. 377 (2015).

¹³ WILLIAM H. PAGE & JOHN E. LOPATKA, THE MICROSOFT CASE: ANTITRUST, TECHNOLOGY, AND CONSUMER WELFARE 231 (2007).

At a more basic level, what's the statutory basis for unilateral effects cases? The original Clayton Act targeted potential monopolies, the "tight combinations" at the heart of the "trust problem." The 1950 amendments broadened the scope to include market concentration falling short of monopoly, but which may create the same effects through actual or tacit collusion. The statutory language easily applies to both monopoly and oligopoly, but not to the slight market power conveyed held by the sellers of most differentiated products. The Supreme Court needs to address whether this is a proper basis for invoking Section 7.

The Court should also examine the consideration of efficiencies in horizontal cases, for the reasons already discussed with regard to vertical cases. Finally, the Court should address entry and potential entry in merger cases. The Court recognized the salutary effects of perceived potential competition in its old conglomerate merger cases, and basic economics counsels that high profits will be competed away if entry is not overly difficult. The 2010 Guidelines recognize the importance of entry, but attempt to place on the parties the burden of establishing that entry will be "timely, likely, and sufficient," a requirement rejected in *Baker Hughes*.¹⁵ One could just as easily argue that a demonstration that entry is difficult should be part of the required showing for the structural presumption. High entry barriers are an integral determinate of market structure.

Unless things change, of course, there will be no Supreme Court consideration of these vital issues, or even a great deal of circuit court attention. Since the passage of the Hart-Scott-Rodino ("HSR") Act, merger enforcement has become very different than the rest of antitrust practice. As Peter Carstensen has noted, with regard to mergers the Justice Department and FTC have become "regulatory agencies subject to modest judicial review."¹⁶ With premerger review, most merger concerns are settled by agreement with divestitures or behavioral remedies. In the rare cases that go court, few go beyond the district court's decision on the agency's motion for a preliminary injunction. The merger parties seldom seek appellate review, and do not appeal to the Supreme Court. It just does not make business sense to wait that long rather than to give in and settle or drop the deal altogether. The agencies, on the other hand, could appeal to the Court even if the courts deny preliminary relief and permit the merger to go forward, as the agencies routinely did before the HSR Act. But they do not.

Why should they? Under the current merger regime, they have a more effective way to shape the law in their favor. In the absence of appellate guidance, the district courts resort to the Horizontal Merger Guidelines.¹⁷ As Hillary Greene has shown, courts frequently rely on the Guidelines in a precedent-like manner, i.e., applying them uncritically. She notes that courts switched from the concentration ration ("CR") measures of concentration used in the Supreme Court's merger precedents to the then-controversial HHI after its use in the 1982 Guidelines. For a short transition period, courts used both measures. While one would have expected some judicial weighing of the two measures, especially in light of the lack of a consensus among economists at the time that the HHI was superior, Professor Greene found only one case with such a discussion. This lack of legal engagement with the issue, she concludes, "allowed the HHI measure … to reframe the legal analysis without meaningful debate."¹⁸

This story has been repeated on almost every important merger issue: the hypothetical market test, the use of the SSNIP, the legal validity of the unilateral effects theory, and the stringent requirements for efficiencies, especially that they be passed on to consumers. The Guidelines position on each has been accepted with little or no judicial discussion. In one case, the Guidelines have seemingly reversed a court of appeals. As mentioned above, the Guidelines' requirement that entry be "timely, likely, and sufficient" is almost identical to the standard that the D.C. Circuit rejected in *Baker Hughes*. Yet, as Professor Greene found, this new standard subsequently met with judicial approval, even among district courts in the D.C. Circuit.¹⁹

In short, the Guidelines now receive *Chevron*-like guidance, even though Congress never authorized either agency to make antitrust law in the way it has authorized agencies like the EPA and OSHA to make legislative rules with binding legal effect. In administrative law terms, the Guidelines are merely policy statements. They have no legally binding effect, and are not entitled to *Chevron* deference. Instead, as every administrative law student knows, they receive only *Skidmore* deference, i.e., only to the discretionary extent that they have the "power to persuade, if

19 Id. at 790-91.

¹⁵ United States v. Baker Hughes, Inc., 908 F.2d 981, 983 (D.C. Cir. 1990). See Hillary Greene, Guideline Institutionalization: The Role of Merger Guidelines in Antitrust Discourse, 48 WILLIAM & MARY L. REV. 771, 799-801 (2006) (Guidelines on efficiency "extremely close" to position rejected in Baker Hughes).

¹⁶ Carstensen, *supra* note 11, at 236.

¹⁷ Antitrust courts also rely heavily on the Areeda & Hovenkamp treatise in merger cases, as they do in all antitrust matters. See Hillary Greene & D. Daniel Sokol, *Judicial Treatment of the Antitrust Treatise*, 100 Iowa L. Rev. 2039 (2015). See also Rebecca Haw Allensworth, *The Influence of the Areeda-Hovenkamp Treatise in the Lower Courts and What It Means for Institutional Reform in Antitrust*, 100 Iowa L. Rev. 1919 (1996). But no treatise, no matter how excellent — and it is truly excellent — can provide binding precedent that governs throughout the country. Only the Supreme Court can do that. See HERBERT HOVENKAMP, THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION 4 ("Lack of Supreme Court supervision has led to many divisions among the federal courts of appeal") (2005).

¹⁸ Greene, supra note 17, at 791.

lacking the power to control."²⁰ But before according policy statements this persuasive power, courts are supposed to consider a set of factors, including the thoroughness of their consideration, the power of their reasoning, their consistency with earlier and later pronouncements, and anything else that recommends them.²¹ But as Professor Greene has shown, the district courts do not do this.

This is the worst of all administrative law worlds. The procedural requirements of the Administrative Procedure Act bind agencies that have actually been authorized to make policy either by rulemaking or in agency adjudications. Their decisions are subject to "hard look" review by the courts. The antitrust agencies, by contrast, are not authorized to make merger law and do not engage in notice and comment rulemaking. Their guidelines are certainly not getting "hard look" review.

Rather clearly, this is a serious problem. Appropriate administrative procedure, including effective judicial review, is essential to the legitimacy of the modern administrative state. The procedural protections of the Administrative Procedure Act as applied by the federal courts provide a substitute for the Constitution's system of checks and balances that obtains outside the administrative sphere. It is hard to see why the regulation of mergers by the Antitrust Division and the FTC should be an exception. No other economic regulation is.

The thesis of this short article is that we need a solution to this problem. Here are some ideas of the shape a possible solution could take.

Under the 1903 Expediting Act either party could appeal directly to the Supreme Court from a district court decision in a Justice Department merger challenge. The Expediting Act was modified in 1974 to route *almost all* of these appeals to the courts of appeal before they could go to the Court. The revision, however, still permits direct review by the Court if, on application of either party, the district court enters an order stating that "immediate consideration" by the Supreme Court is "of public importance in the administration of justice." The Court can then either hear the case or remand it to the court of appeals for decision in the usual manner.²² The provision does not apply to preliminary injunctions, only to final judgments, and it doesn't apply to cases brought by the FTC.²³ Even so, this section could provide a vehicle for at least some Supreme Court review of Justice Department cases. To be sure, the typical case formally seeks only preliminary relief. But the parties to a preliminary injunction hearing can agree to make it on the merits, which is what these cases already are de facto, if not de jure. It is hard to imagine how a trial on the merits in *AT&T* would have differed from a conventional trial on the merits.

A better solution would be an amendment to this provision that would cover, in merger cases only, appeals from preliminary injunction proceedings brought by either agency. The primary vice of the Enabling Act was its complete elimination of court of appeals review in virtually every civil case brought by the Department under the Sherman or Clayton Acts. The current provision, either as is or with my suggested amendments, lets the district court decide in the first instance whether there is an important issue in need of resolution by the Supreme Court. If, for example, the district court in *AT&T* had enjoined the merger, it could have found that immediate Supreme Court review of AT&T's was appropriate in view of the need for useable precedent in vertical merger cases. The Court itself would have had the final say, of course, just as it does with petitions for certiorari in other antitrust appeals.

Other legislative solutions are available. Congress could create a special court of appeals, modeled on the Federal Circuit, for mergers or even for all antitrust cases. Alternatively, as it did with the Nixon and Ford price control regimes, Congress could provide for a special court of appeals staffed by sitting appeals judges selected for limited periods by the Chief Justice.²⁴

Finally, Congress could amend the HSR Act to provide a more fundamental change that reflects the regulatory function of the agencies in merger cases. It could provide for merger challenges to be resolved in administrative adjudications under the APA, at either the FTC or a new agency in the Justice Department. What is now a second request under HSR could be the commencement of a formal investigation, as it already is under Part II of the FTC's Rules of Practice.²⁵ Instead of seeking a preliminary injunction, the agency could proceed to an administrative adjudication, as the FTC does in other antitrust matters. To deal with the special timing problems of merger regulation, the amendment could provide for expedited proceedings at the agency and expedited judicial review.

21 *Id*.

25 16 C.F.R. § 2.20.

²⁰ Skidmore v. Swift & Co., 323 U.S. 134, 140 (1944).

^{22 5} U.S.C. § 529(b).

²³ Section (a) provides that interlocutory orders can only be reviewed in the courts of appeals. Like the original Expediting Act, section 529 does not apply to the FTC.

²⁴ See Federal Judicial Center, *Temporary Emergency Court of Appeals, 1971-1992*, https://www.fjc.gov/history/courts/temporary-emergency-court-appeals-1971-1992.

I would not recommend that the FTC or a new agency have the power to promulgate legislative rules for mergers. Instead, I would limit it to making policy in adjudications, as some other agencies do, with judicial review in the courts of appeals or in a special court like the ones mentioned above, or even, in special cases, at the Supreme Court under a provision like the special review provision of the revised Expediting Act.

I repeat, however, that my thesis is that we need some solution to the law deficit problem in mergers, not that one of the ideas I have briefly sketched here is the best solution. I am sure that others could provide better fixes. But it is time for the agencies and the rest of the antitrust community to start looking for them.







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