Hearing #13 on Competition and Consumer Protection in the 21st Century

Federal Trade Commission

Headquarters April 12, 2019

Welcome

We Will Be Starting Shortly

Welcome

Bruce Kobayashi Federal Trade Commission Bureau of Economics

Introductory Remarks

Joseph J. Simons, Chairman Federal Trade Commission

What Have We Learned from Existing Merger Retrospectives?

Session moderated by:

Daniel J. Greenfield Federal Trade Commission Bureau of Economics

What Have We Learned from Existing Merger Retrospectives?

Merger Retrospectives in the Health Care Sector

Leemore S. Dafny

Harvard University

National Bureau of Economic Research

Hospital Mergers are Well-Studied

 Many analyses, both of specific transactions and of large samples of transactions

Most recently, Garmon (2017) and Cooper et al (2019)

- Strong evidence that mergers of close rivals tend to lead to price increases; quality effects also generally negative
- Research confirms that merger reviews should consider effects of insurance plan design and insurer competition
 > Gowrisankaran, Nevo & Town 2015; Ho & Lee 2017)
- Recent evidence that cross-market mergers tend to lead to price increases as well (Lewis and Pflum 2017; Dafny, Ho & Lee 2019), and cost reductions (Schmitt 2017)

Research on other Providers, Insurers, and Pharmaceuticals is Growing

- Mergers in other provider sectors also tend to lead to higher prices
 Physicians (horizontal e.g. Koch and Ulrick 2017; vertical e.g. Capps et al. 2018)
 Dialysis facilities (Dafny et al; Wollman 2018/19; Eliason et al 2019)
- Insurer merger retrospectives document higher premiums (notwithstanding lower wages to healthcare professionals)

Commercial insurance (Dafny et al 2012; Guardado et al 2013)

- Pharmaceutical merger evaluations emphasize impacts on innovation; PBM mergers not studied
 - Recent examples: Ederer et al (2018); Richman and Shulman (2017)



Merger Retrospectives To Date Focus on Price Effects of Horizontal Transactions

- Other key outcomes are understudied, e.g. QALYs, clinical outcomes, patient experience, technology adoption, and product/service variety
 - Some exceptions include Garmon and Kmitch forthcoming; Koch et al. 2018 working paper on clinical quality following hosp-physician mergers
- Studies of vertical combinations are rare (so far), with hospitalphysicians a notable exception
- Academic studies focus on large samples; more detailed case studies likelier to be undertaken by DOJ/FTC economists



What Have We Learned from Existing Merger Retrospectives?

Non-Price Effects of Mergers

Jeff Prince

Indiana University Kelley School of Business

Identifying Causal Effects of Mergers

- Methods
 - Diff-in-diff
 - Most common, e.g., Prince & Simon (2017)
 - Matching
 - Unobservables due to politics, not outcome-influencing factors (e.g., Gaynor et al. 2012)
 - Instrumental variables
 - E.g., Colocation as instrument (Dafny, 2009)



Identifying Causal Effects of Mergers

- Methods (cont'd)
 - Focusing on rivals, rather than merging firms (Eckbo 1983)
 - Structural model with ex post assessment (Hosken & Weinberg 2013)
- Price vs. Non-price Effects
 - Rationale for using rivals as control may be greater for non-price effects



Notable (Non-Price) Findings Thus Far

- Hospital mergers
 - Evidence of price increases (e.g., Dafny 2009)
 - Mixed, and often small, quality effects (IQI, PSI, etc.)
- Airlines
 - Again substantial price effects (e.g., Kim & Singal 1993)
 - Some evidence on quality impacts...



Non-Price Findings for Airlines

- On-time (OTP) performance is often a focus
 - We find initial worsening followed by longer-term improvements
 - Consistent with coordination challenges followed by efficiency gains
- Other measures of interest
 - Routing quality, cancellations, lost baggage, etc.
 - Other work shows worsening on some dimensions (Chen & Gayle 2019)



Non-Price Findings for Airlines

- We also find OTP largely worsens in response to LCC entry (and threats)
- Speaks to ambiguity in relationship between quality and competition / market power (both theoretically and empirically)
 - Contrast this with price



Quality Measurement Challenges

- With increased data and measurement, the range of quality metrics to consider is growing
 - Healthcare (wide range of health outcomes)
 - Technology (smartphone features)
- Key issue: What (subset of) quality measures to examine?
 - Theory is even more complicated for multi-dimensional quality competition
 - Concern about data mining / cherry picking results / p-hacking



Main Takeaways

- Retrospective merger findings for non-price outcomes is quite mixed
- Highlights the importance of careful, disciplined industry analysis
 when assessing merger impact, particularly for non-price outcomes
 - In contrast to price, the lack of a clear tie between market power and nonprice variables (quality) likely contributes to the ambiguity in findings to date



What Have We Learned from Existing Merger Retrospectives?

Merger Retrospectives in the Petroleum Industry

Christopher T. Taylor Federal Trade Commission Bureau of Economics

Views expressed are the speaker's, not necessarily those of the Federal Trade Commission or any of its Commissioners

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Petroleum Merger Retrospectives

- Three types of mergers reviewed:
 - Merger of refineries (bulk suppliers) horizontal
 - Merger of distribution/retailing assets horizontal
 - Merger of refinery and distribution/retailing vertical



Petroleum Merger Retrospectives by FTC staff

- Seven FTC studies covering nine transactions (examples)
 - Taylor and Hosken (2007) Journal of Industrial Economics
 - Simpson and Taylor (2008) Journal of Law and Economics
 - Hosken et al (2011) American Economic Review
 - Greenfield, Kreisle and Williams (2015) BE WP # 327
 - Ongoing research agenda
- Studies by BE Staff do not find consistent evidence of a increase in retail price.
 - Mixed results on available wholesale data.
- FTC Technical Report Replicating GAO (2004)
 - Available on FTC website



Petroleum Merger Retrospectives by GAO

- Two reports by the GAO (2004) and (2009)
 - GAO (2004) results partially available in Karikari et al (2006)
 - GAO (2009) results partially available in Kendix and Walls (2010)
 - Both studies examine wholesale prices in many cities covering multiple transactions.
- GAO(2004) examined eight petroleum mergers between 1994 and 1999.
 - Provided 28 estimated effects. Found 16 positive effects, seven negative effects, five no effect.
 - FTC technical report (2004) replicated and did robustness checks of various assumptions.
 - Merger results were very sensitive to the identification assumptions and omitted data.
 - One transaction in GAO(2004) was also reviewed in Taylor and Hosken (2007)
 - Found no consistent retail price effect.



U.S. Petroleum Retrospectives (cont.)

- GAO (2009) reviewed seven transactions
 - Found two positive wholesale price effects, one negative effect and four with no effect.
 - Used different identification strategy from GAO(2004)
 - One transaction with a price increase was examined in Silvia and Taylor (2013)
 - No retail price effect of that transaction.
- Hastings (2004) and Hastings and Gilbert (2005)
 - Both papers review changes in vertical integration in California
 - Both papers found price effects from changes in vertical integration.
 - The transactions in these studies were reviewed in Taylor et al (2010) and Hosken et al (2011)
 - No consistent retail price effect of these transactions.



Non U.S. Petroleum Merger Retrospectives

- Multiple studies in Canada, Australia.
 - E.g. Hyde (2002), Sen & Townley (2010), Houde (2012)
- Study of Argentina Coloma (2002)
- Multiple Studies in Europe
 - E.g. Spain Jimenez & Perdigueo (2018), Netherlands Soetevent et al (2014)



Conclusions of Non U.S. Studies

- Studies generally find price effects of the transactions.
 - In some cases, a lack of effects was due to pre-existing collusion.
- The levels of concentration in the industry in these countries are generally much higher than in the United States.
- Some of these countries have regulations that effect entry or competition.



Lessons Learned About Retrospectives Merger retrospectives sound simple but...

- Studies need clear, well documented hypotheses and identification strategies.
 - Need to describe the assets involved in the transaction and the anticompetitive theory
 - Need to examine prices of final goods (retail price)
 - Market definition (geographic) is crucial and sometimes difficult
 - Reviewing many markets and multiple transactions within one study is difficult



Lessons Learned About Retrospectives(cont.)

- Study needs sufficient documentation and data availability for replication and robustness checks.
 - Multiple studies on the same transaction are useful.
 - Part of Replication/Robustness is decomposing effects.
- Link results and anticompetitive theory so results can be generalized.
 - Clear description of assets, markets, concentration.
 - Mechanism by which change in market(s) results in price/output change.



What Have We Learned from Existing Merger Retrospectives?

John E. Kwoka, Jr. Northeastern University Department of Economics

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What Have We Learned from Existing Merger Retrospectives?

Panel Discussion:

Leemore S. Dafny, Jeff Prince, Christopher T. Taylor, John E. Kwoka, Jr.

Moderator: Daniel J. Greenfield



Break 10:45-11:00 am

How Can Merger Retrospectives Be Used to Improve Prospective Merger Analysis?

Session moderated by:

Daniel S. Hosken Federal Trade Commission Bureau of Economics

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How Can Merger Retrospectives Be Used to Improve Prospective Merger Analysis?

Hospital Merger Retrospectives and Prospective Merger Analysis

Christopher Garmon

University of Missouri – Kansas City Henry W. Bloch School of Management

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Hospital Merger Enforcement

- Hospital Merger Retrospectives Project
 - Non-profit hospital mergers can be anticompetitive
 - Anticompetitive mergers can occur in urban areas
- Recent merger challenges used first-order screens (diversions, UPP, WTP) along with structural measures
 - ProMedica/St. Luke's, Pinnacle/Hershey, Advocate/NorthShore
- Are these screens accurate in predicting post-merger price effects?



Accuracy of Hospital Merger Screening Methods

- <u>Garmon (2017)</u>: Comparison of screens to price changes for 28 consummated mergers of competing hospitals
 - All screens constructed with data usually available in initial investigation
 - Based on predictions of discrete choice demand models
 - Price estimated using method of <u>Dafny (2009)</u>
 - Price change measured relative to synthetic control
 - Change in operating cost per adjusted admission also measured relative to synthetic control



Selection Based on Thresholds

Excluding Mergers with Variable Cost Savings

	Correct Prediction	False Positive	False Negative	Mean Relative Price Change for Flagged Mergers
HHI (HRR Bed Shares) Guidelines	12	0	5	28.4%
HHI (HSA Disch Shares) Guidelines	9	8	0	16.2%
HHI (WSA Disch Shares) Guidelines	12	4	1	20.3%
Minimum Change in WTP > 6%	13	2	2	23.3%
Minimum UPP > 4%	13	4	0	20.6%

Correct Prediction = (Flagged merger as problematic and merger associated with statistically significant relative price increase) or (Did not flag merger as problematic and merger not associated with statistically significant relative price increase)

False Positive = Flagged merger as problematic and merger not associated with statistically significant relative price increase

False Negative = Did not flag merger as problematic and merger associated with statistically significant relative price increase

Guidelines = Horizontal Merger Guidelines thresholds = Post-Merger HHI > 2500 and HHI Delta > 200



WTP Change vs. Price Change



Hollow dots = North Carolina/Missouri

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Limitations

- Selection bias due to active antitrust enforcement (<u>Carlton</u> (2009))
- Post-merger changes affecting price unrelated to competition
- Theory/simulation necessary for evaluation
 - <u>Balan and Brand (2018)</u> "Simulating Hospital Merger Simulations" FTC Working Paper #334


How Can Merger Retrospectives Be Used to Improve Prospective Merger Analysis?

Frank Verboven

KU Leuven Department of Economics

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Merger retrospective: GSK-AZT in Swedish analgesics market – background

- Large merger (100% market share in one segment)
- Large post-merger price increases (+40%) enable one to evaluate a rich set of predictions:
 - Price effects by brand
 - Market share effects by brand
- Four demand specifications
 - Unit demand (linear price) vs constant expenditures (log price)
 - Nested logit (NL) versus random coefficients logit (RCL)
- Supply side
 - Account for deviations from Bertrand-Nash before merger (to fit markups)
 - Account for coinciding cost changes by some outsiders after the merger



Merger retrospective: GSK-AZT in Swedish analgesics market – main findings

- Demand side
 - <u>Functional forms</u>: unit demand < constant expenditure demand (less plausible cross-brand markup pattern, underpredicted price effects)
 - <u>Substitution</u>: RCL ≥ NL
 - (somewhat underpredicted price effects, better predicted market share effects)
 - \rightarrow We focused on comparing NL and RCL under constant expenditure specification
- Supply side
 - Reasonable <u>average</u> predicted price effects, but:
 - Outsiders' price responses are larger than predicted
 - Smaller insider does not raise price by more than the larger insider
- Factors that can explain gaps:
 - Outsider price responses: plausible marginal cost increase, and/or continuation of partial coordination
 - Insiders' price responses: possibly cost disadvantage to smaller merger firm (or misspecified demand/supply)
 - Insiders' market share change: possible increase in perceived quality



Merger retrospectives: broader lessons

- Demand side:
 - In any demand model (e.g. NL versus RCL), it is key to capture the main dimension(s) of product differentiation that are relevant to the merger
 - Magnitude of predicted price effects varies depending on the model and functional forms (in the absence of efficiencies).
 - \rightarrow Sensitivity analysis desirable
- Supply side
 - Evaluate pre-merger conduct (may compare predicted with actual markups)
 - Evaluate post-merger changes in conduct
 - \rightarrow Attempt to incorporate prior information
- When evaluating merger simulation as a tool, account for other factors that may have changed
 - Efficiencies due to the merger
 - Unrelated coinciding cost or quality changes

Merger retrospectives: future research

- More studies on horizontal merger retrospectives
 - Typical merger simulations
 - Price-concentration analysis (geographic markets)
- Retrospectives in other contexts:
 - bidding markets
 - vertical mergers, ...
- Evaluating short-term versus long-term effects
 - In particular in the presence of new entry, other changing factors, market dynamics
- Evaluating non-price effects (product development, investment)
- Evaluating efficiency claims
 - Can we come up with a general presumption ("default efficiency")?



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Concluding remarks

- Merger retrospectives are useful to evaluate enforcement tools
 - Continue recent focus on evaluating horizontal merger simulation
 - Extend towards other tools (price-concentration) and other settings (vertical mergers)
- Challenges and limitations
 - Accounting for non-merger related changes
 - Accounting for coordinated effects (inherently difficult to predict)
 - Accounting for market dynamics (short-term versus long-term effects)



How Can Merger Retrospectives Be Used to Improve Prospective Merger Analysis?

Understanding Competition with Merger Retrospectives

Matthew C. Weinberg

The Ohio State University Department of Economics

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Case Studies of Merger Simulation Accuracy

EVIDENCE ON THE ACCURACY OF MERGER SIMULATIONS

Matthew C. Weinberg and Daniel Hosken*

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Matthew C. Weinberg and Daniel Hosken*

American Economic Review: Paners & Proceedines 2011, 101:3, 51-55 ://www.aeaweb.org/articles.php?doi=10.1257/aer.101.3.51

More Evidence on the Performance of Merger Simulations

By MATTHEW C. WEINBERG*

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American Economic Review: Papers & Proceedings 2011, 101:3, 51-55 http://www.aeaweb.org/articles.php?doi=10.1257/aer.101.3.51

More Evidence on the Performance of Merger Simulations

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Received for publication September 9, 2009. Revision accepted for ablication August 23, 2012. (5%-10%,) increases in marginal costs postacquisition to rec-oncile the estimated and simulated price effects. Finally, we Received for publication Seguender 9, 2009, Revision accepted to "Withoug: Dread University: Hodars: Urderal Track Commission Withoug: Dread University: Hodars: Urderal Track Commission Withoug: Dread University: Hodars: Urderal Track Commission Dreads and Dreads And Dreads And Dreads And Dreads (Dreads and Dreads And Dreads And Dreads And Dreads And Dreads And Dreads Dreads And Dreads And Dreads And Dreads Dreads And Dreads And Dreads And Dreads And Dreads And Dreads And Dreads Dreads And Dreads And Dreads And Dreads And Dreads And Dreads And Dreads Dreads And Dreads And Dreads And Dreads And Dreads Dreads And Dreads commissioners. A supplemental appendix is available online at http://www.mitpress journals.org/doi/suppl/10.1162/RIST_a_00347. ournals.org/doi/uppl/10.1162/RIST_a_00347. 1 See Baer (1997) for a discussion of the costs of retrospective antitrust big/to toward horizontal mergers.

The Review of Economics and Statistics, December 2013, 95(5): 1584-1600 © 2013 by the President and Fellows of Harvard College and the Massachusetts Institute of Technology

policy toward horizontal mergers

ary and similary and is an model of Bertrand competition. Next, using both the merger would reduce consumer surplus pre- and postmerger data, I directly estimate According to press reports, the Department of the price effects of the mergers using standard Justice reviewed the case but did not take any estimated price effects. increased prices. These estimates are calculated period from October 27, 1996 until January 2.

techniques from the program evaluation litera-ture following Orley C. Ashenfelter and Daniel The data used in this study are scanner data Hosken (forthcoming). If the assumptions necessary to simulate the merger hold, the simu- Incorporated (IRI). The data are weekly total lated price effects should be close to the directly revenue and unit sales by week, region, and Universal Product Code (UPC). IRI's food The direct estimates imply that the merger channel covers 64 regions, and the data span the

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by comparing the change in the price of the 2000. Prior to the merger, there were seven firms in the market producing four branded tampons

1 New York Times, June 7, 1997.

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Source: Matthew C. Weinberg (2011) "More Evidence on the Performance of Merger Simulations," American Economic Review: Papers and Proceedings, 101(3): 51-55; Daniel Hosken and Matthew C. Weinberg (2013) "Evidence on the Accuracy of Merger Simulations," Review of Economics and Statistics, 95(5): 1584-1600



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Case Studies of Merger Simulations: Overview

- Studied three packaged consumer products: motor oil, breakfast syrup, feminine hygiene products.
- In each case some specification (AIDS, Linear, Logit with OLS or IV) was reasonably close to direct estimates.
 - Which specification varied by market.
- Simulated price changes sensitive to demand system (AIDS, Linear, Logit).
 - In some specifications little success getting reasonable demand estimates.
 - In some cases more than one estimated demand specification looked reasonable, but gave very different simulated price effects.
 - BLP type models could in principle be more flexible.
- Explored explanations of bias.
 - Checked whether changes in demand, changes in cost, or changes in competition could explain forecast error but little success isolating source.
 - Could have used more ex post data in estimation.



More recent research focusing on conduct.

Econometrica, Vol. 85, No. 6 (November, 2017), 1763-1791

UNDERSTANDING THE PRICE EFFECTS OF THE MILLERCOORS JOINT VENTURE

NATHAN H. MILLER McDonough School of Business, Georgetown University

MATTHEW C. WEINBERG LeBow College of Business, Drexel University

We document abrupt increases in retail beer prices just after the consumma of the MillerCoors joint venture, both for MillerCoors and its major compet Anheuser-Busch. Within the context of a differentiated-products pricing mode test and reject the hypothesis that the price increases can be explained by mow from one Nash-Bertrand quilibrium to another. Counterfactural simulation that prices after the joint venture are 6%=5% higher than they would have bee Nash-Bertrand competition, and that markups are 17%=18% higher. We relive results to documentary evidence that the joint venture may have facilitated prio dination.

KEYWORDS: Market power, mergers, unilateral effects, coordinated effects, ar policy, merger enforcement, brewing industry.

1. INTRODUCTION

ECONOMIC THEORY indicates that repeated interaction within oligopolic collusive equilibria if there are few enough firms (e.g., Friedman (1971), Accordingly, the Merger Guidelines of the United States Department of and Federal Trade Commission (FTC) emphasize that mergers in concena facilitate coordination and nearly 60% of merger complaints filed by FTC over 1990–2014 allege coordinated effects (Gilbert and Greene (20 prical research, by contrast, focuses on the unilateral effects of mergers | the internalization of diverted sales between merging firms selling differe (e.g., Berry and Pakes (1993), Hausman, Leonard, and Zona (1994), Wer (1994), Nevo (2000)). In these models, post-merger coordination is not (stead, firms are assumed to play one-shot Nash-Bertrand pricing equilibi and after the merger.

We study the economic effects of MillerCoors, a joint venture of SABM Molson Coors Brewing that combined the operations of these brewen States. The joint venture underwent antitrust review as a merger betwe and third largest firms in the U.S. brewing industry. It was approved June . DOJ on the basis that merger-specific cost reductions would likely outweighpetitive effects. Normal course documents of Anheuser-Busch InBev (ABB

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We thank Jonathan Baker, Dan Hosken, Robert Porter, Ted Rosenbaum, Chuck Romeo, Gloria Sheu, and Jonathan Williams for detailed comments, along with seminar participants at various economics departments and business schools. We have also benefited from conversations with John Asker, Orley Ashenfelter, Michael Baye, Hank Farber, Allan Collard-Wecker, Michael Grubb, Ali Hortagu, J.F. Houde, Aviv Nevo, and Mike Waldman, among others. Conor Ryan and Andrew Gellert provided careful research assistance. All estimates and analyses in this paper based on SymphonyIRI Group, Inc., data are by the authors and not by SymphonyIRI Group, Inc.

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Source: Nathan H. Miller, Matthew C. Weinberg, "Understanding The Price Effects of The MillerCoors Joint Venture," Econometrica

Econometrica, Vol. 85, No. 6 (November, 2017), 1763–1791

UNDERSTANDING THE PRICE EFFECTS OF THE MILLERCOORS JOINT VENTURE

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Miller-Coors Merger

- Combines the U.S. operations of SABMiller and Molson Coors
 - 2nd and 3rd largest brewers in the U.S.
 - Anheuser-Busch Inbev (ABI) is #1
 - Brands: Bud Light, Budweiser, Miller Lite, Coors Light
 - JV announced Oct. 2007, cleared by DOJ June 2008
- Motived on basis of lowering distribution costs
 - Molson Coors brews (predominately) from Golden CO
 - SABMiller has six breweries dispersed through U.S.
 - Production rationalized across brewing facilities
 - Efficiencies realized (SEC, Ashenfelter, Hosken, and Weinberg (2015))

Pricing Before and After Miller-Coors





Approach and Main Results

- Estimate demand on data spanning before and after merger.
- Supply nests Bertrand and allows for a particular type of post-merger coordination.
- Assume ABI costs do not increase relative to more distant competitors (eg Corona, Heineken).
 - Prices rose by more than what can be accounted for with "Unilateral Effects"
 - Taken literally, combined Miller/Coors and ABI internalize one-third of pricing externality post-merger
 - Consumer surplus down about 4%
 - Without coordination consumer surplus would have been essentially unchanged



Deviation from Static Nash-Bertrand Pricing





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Miller-Coors Merger: Coordinated Effects?

- ABI "Conduct Plan". ABI sends out price list with increases in August, rescinded if MillerCoors does not match
 - "Transparent so competitors can clearly see the plan"
 - "Simple so competitors can understand the plan"
 - "Consistent so competitors can predict the plan"
- Timing: Annual Reports suggest 2008
 - 2005-2007: "extremely competitive environment"
 - 2009-2010: "robust pricing"; "disciplined revenue management"; "sustained price increases"



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Areas for more work

- Relatively Straightforward Areas:
 - Marginal Cost Efficiencies.
 - Product Quality Efficiencies.
 - Bargaining Weights.
 - Tests of static Nash.
- Coordinated effects.
- Divestitures.
- Bargaining externalities.
 - If there are three suppliers A, B, and C, pre-merger the buyer does not purchase from B or C, what happens to buyer if B and C merge?
- Entry.
- Product repositioning.



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How Can Merger Retrospectives Be Used to Improve Prospective Merger Analysis?

Angelike A. Mina

Federal Trade Commission Bureau of Competition

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Why Study Merger Remedies?

- Effective remedies are critical to the Commission's antitrust mission
 - Remedies maintain competition in relevant markets while allowing the Commission to clear the non-problematic parts of the merger
- Updated and expanded on the 1999 Divestiture Study
 - Evaluate the reforms from the 1999 Study, such as more frequent use of upfront buyers



Study Goal

- Assess whether remedy maintained or restored competition
- Evaluate issues arising during the process in order to improve future remedies



Study Methods

- Analysis period restricted to 2006-2012, during which the Commission issued 89 merger orders
- The 89 orders included:
 - 15 orders affecting supermarkets, drug stores, funeral homes, dialysis clinics, and other health care facilities evaluated with questionnaires
 - 24 orders affecting the pharmaceutical industry evaluated using internal information
 - 50 orders evaluated using a case study methodology (our focus today)
 - Both horizontal (46) and vertical (4) merger remedies
 - Both proposed (40) and consummated (10) mergers



Study Methods

- Case studies conducted with <u>50</u> of the <u>89</u> orders
 - Evaluated each market separately
 - 184 relevant geographic/product markets
 - But only 46 different buyers
 - Evaluated buyer's ability to maintain competition in the remedial market(s)



Case Study Methodology

The study was a **qualitative retrospective** and the limited sales data gathered were used to corroborate information obtained in interviews

- Internal information reviewed, including Commission memorandums and discussions with the original investigative case teams
- Interviews with respondent, buyer of divested assets, competitors, customers, and monitors
 - original investigative staff participated in the study
 - Over 200 interviews, 67% participation rate
- Sales data (revenue and volume) for 7 years centered on the year of the remedy
 - Nearly 200 6(b) orders, 96% response rate



Study Questions

- Two dimensions:
 - Did the remedy maintain or restore competition?
 - Were there issues or concerns related to the process used to design and implement the remedy?
- Process concerns:
 - Were only significant if they affected or could have affected the remedy's success in meeting the remedial goals of the order
 - These include: concerns about the scope of the divestiture package, funding commitments, due diligence, transfer of back-office functions, length of transition services and supply agreements, and the implementation of hold separates
- Competition:
 - Fully maintaining or restoring competition is the stated goal of all FTC remedies and was the standard used in the study



Ratings: Competition

- Three remedy outcome categories:
 - Success: remedy maintained competition in the relevant market at its pre-merger level or returned to that level within 2-3 years
 - Qualified Success: remedy maintained/restored competition in the relevant market, but it took longer than 2-3 years or success was limited due to unanticipated market shocks
 - Failure: remedy did not maintain or restore competition



Case Study Characteristics

- Merger and Remedy Types
 - Of the 46 horizontal mergers, ten were consummated
 - All 4 vertical mergers were unconsummated

Merger Type		Remedy Type		
		Structural	Non-Structural	
	Horizontal (46)	87% (40)	13% (6)	
	Vertical (4)	0% (0)	100% (4)	
	All (50)	80% (40)	20% (10)	



Case Study Characteristics

Characteristic:				
Buyer Timing				
Upfront Buyer	69%			
Post-Order Buyer	33%			
Package Type				
Selected Assets	67%			
Ongoing Business	40%			
Other Characteristics				
Monitor	74%			
Transition Services	57%			
Asset Maintenance Order	52%			
Supply Agreement	48%			
Hold Separate Order	24%			



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#1 Divestiture of an Ongoing Business Poses Little Risk

Horizontal, Structural, Non-Consummated	Remedy Outcome		
Asset Package	Success	Qualified Success	Failure
Ongoing Business	100%	0%	0%
Selected Assets	56%	11%	33%



Selected Asset Packages Add Risk

- Divestitures of selected assets tended to be successful when buyers:
 - Were knowledgeable about the relevant markets
 - Had similar existing operations or complementary products
 - Were already familiar with the customers
- Several selected asset divestitures succeeded, but encountered difficulties
- The 10 buyers that failed all acquired selected assets—all failed for different reasons
 - The selected asset packages never operated as autonomous businesses before, requiring the buyer to take additional measures before it could compete
 - Some buyers couldn't win customers



#1 Divestiture of an Ongoing Business Poses Little Risk

#2 Upfront Buyers Will Not Always Eliminate the Risk Associated with a Selected Asset Package



#1 Divestiture of an Ongoing Business Poses Little Risk

#2 Upfront Buyers Will Not Always Eliminate the Risk Associated with a Selected Asset Package

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#5 Buyers Remain Reluctant To Bring Issues to Staff or the Monitor as They Occur



How Can Merger Retrospectives Be Used to Improve Prospective Merger Analysis?

Panel Discussion:

Christopher Garmon, Frank Verboven, Matthew C. Weinberg, Angelike A. Mina

Moderator: Daniel S. Hosken

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Break 12:30-1:30 pm

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Remarks

Rebecca Kelly Slaughter, Commissioner Federal Trade Commission

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Should the Findings from Merger Retrospectives Influence Horizontal Merger Policy, And If So, How?

Session moderated by:

Michael G. Vita Federal Trade Commission Bureau of Economics

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Orley Ashenfelter

Princeton University

Industrial Relations Section

Steven Berry

Yale University Department of Economics

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Leemore S. Dafny Harvard Business School

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Deborah L. Feinstein Arnold & Porter

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Aviv Nevo

University of Pennsylvania Department of Economics

Panel Discussion:

Orley Ashenfelter, Steven Berry, Leemore S. Dafny, Deborah L. Feinstein, Aviv Nevo

Moderator: Michael G. Vita



Break 3:15-3:30 pm

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Session moderated by:

Bruce Kobayashi Federal Trade Commission Bureau of Economics

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Nancy L. Rose

Massachusetts Institute of Technology

Department of Economics

John E. Kwoka, Jr. Northeastern University Department of Economics

William E. Kovacic

George Washington University

Law School

Martin S. Gaynor Carnegie Mellon University Heinz College

Dennis Carlton

University of Chicago Booth School of Business

Panel Discussion:

Nancy L. Rose, John E. Kwoka, Jr., William E. Kovacic, Martin S. Gaynor, Dennis Carlton

Moderator: Bruce Kobayashi

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Closing Remarks

David Schmidt

Federal Trade Commission Bureau of Economics

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Thank You