

**THE UNITED STATES FEDERAL TRADE COMMISSION HEARINGS ON
COMPETITION AND CONSUMER PROTECTION IN THE 21ST CENTURY, HEARING
ON CONCENTRATION AND COMPETITIVENESS IN THE U.S. ECONOMY,
COMMENT OF THE GLOBAL ANTITRUST INSTITUTE, ANTONIN SCALIA LAW
SCHOOL, GEORGE MASON UNIVERSITY**

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This Comment is submitted in connection with the United States Federal Trade Commission's ("FTC's") hearing on Concentration and Competitiveness in the U.S. Economy as part of the Hearings on Competition and Consumer Protection in the 21st Century. We submit this Comment based upon our extensive experience and expertise in antitrust law and economics.¹ As an organization committed to promoting sound economic analysis as the foundation of antitrust enforcement and competition policy, the Global Antitrust Institute commends the FTC for holding these hearings and for inviting discussion concerning a range of important topics.

¹ The Global Antitrust Institute (GAI), a division of the Antonin Scalia Law School at George Mason University (Scalia Law), is a leading international platform for economic education and research that focuses upon the legal and economic analysis of key antitrust issues confronting competition agencies and courts around the world. University Professor Joshua D. Wright, Ph.D. (economics), is the Executive Director of the GAI and a former U.S. Federal Trade Commissioner. John M. Yun, Ph.D. (economics), is the Director of Economic Education, Associate Professor of Law at Scalia Law, and former Acting Deputy Assistant Director in the Bureau of Economics, Antitrust Division, at the U.S. Federal Trade Commission. Professor of Law Douglas H. Ginsburg is a Senior Judge, United States Court of Appeals for the District of Columbia Circuit, Chairman of the GAI's International Board of Advisors, and a former Assistant Attorney General in charge of the Antitrust Division of the U.S. Department of Justice. Tad Lipsky is the Director of GAI's Competition Advocacy Program, Adjunct Professor at Scalia Law, a former Deputy Assistant Attorney General for Antitrust and a former Acting Director, Bureau of Competition, U.S. Federal Trade Commission. The GAI gratefully acknowledges substantial assistance in the preparation of this Comment provided by Scalia Law student Dylan Naegele.

Now is a pivotal moment in policy debates about the appropriate relationship between market concentration and antitrust law and competition policy. Competition policy makers, such as the Federal Trade Commission, are faced with a proposed narrative that increasing corporate concentration has caused an increase in market power, which in turn has led to higher corporate profits, reduced output, higher prices, increased economic inequality, and a reduction in overall consumer welfare. Allegations of lax antitrust policy, and lenient merger enforcement in particular, are claimed as the cause of these and other problems. In the approximately three years since Furman & Orszag published the study that catalyzed the current debate,² these claims have attained the status of axioms in some aspects of public discourse, with some asserting that such stylized facts should be treated as the starting point for policy proposals rather than as testable hypotheses.

It is important to regularly revisit whether antitrust law and institutions can better calibrate their missions to serve their purpose of protecting competition. It is imperative, however, that underpinning discussions concerning policy effectiveness is robust, informed, and appropriately understood quantitative evidence. Our own antitrust history makes clear that when competition policy is guided by popular opinion and intuition drawn from incomplete evidence, it is competition and ultimately consumers that are

² Jason Furman & Peter Orszag, *A Firm-Level Perspective on the Role of Rents in the Rise in Inequality*, Presentation at “A Just Society” Centennial Event in the Honor of Joseph Stiglitz, Columbia University (Oct. 16, 2015).

harmed.³ As the United States' recent Note to the OECD observed, "with no reliable data for most of the U.S. economy, it is impossible to know whether market concentration increased significantly in any parts of the economy."⁴ Absent evidence that the increase in market power is a verifiable observation, rather than a conjecture based on opinion, there is no reason to adopt radical changes to the antitrust laws.

The fundamental competition *policy* question presented in the concentration debate is, should merger policy be tightened or relaxed from current levels? Despite considerable enthusiasm from proponents of greater antitrust activity, as a matter of economic theory and evidence, we are not close to a policy-relevant answer. This comment addresses the critical gaps in the existing body of evidence that forestall reliable policy inferences. Much of the modern policy debate is motivated by changes in highly aggregated measures of industry concentration. Aggregate measures of corporate concentration, however, are of little relevance because antitrust policy inferences explicitly require data on markets, not sectors. Moreover, the current empirical evidence consists largely of cross-sectional studies that cannot identify the claimed causal relationship between either market concentration or

³ See, e.g., ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* (1978); Neil W. Averitt & Robert H. Lande, *Using the "Consumer Choice" Approach to Antitrust Law*, 74 *ANTITRUST L.J.* 175, 178 (2007) (describing the antitrust paradigm of the 1960s and 1970s as "standardless and unduly hostile to business" and the consumer welfare standard as "an immense improvement" over the big is bad era); Douglas H. Ginsburg, *Originalism and Economic Analysis: Two Case Studies of Consistency and Coherence in Supreme Court Decision Making*, 33 *HARV. J.L. & PUB. POL'Y* 217, 217 (2010) ("Forty years ago, the U.S. Supreme Court simply did not know what it was doing in antitrust cases.").

⁴ Note by the United States, *Market Concentration*, OECD at 3 (2018), [https://one.oecd.org/document/DAF/COMP/WD\(2018\)59/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2018)59/en/pdf).

intensity of antitrust policy on the one hand, and economic performance on the other. And here, as in many matters of evidence-based policy, causation matters. Indeed, one of the primary lessons of the earlier structural debates of the 1970s and 1980s in industrial organization economics, and in antitrust, was that concentration and competition are different things and conflating the two can lead to flawed policy assumptions and harmful policy results.⁵

Upon review, the evidence used in support of the proposition that increasing concentration has led to increased market power is plagued with issues related to measurement, inference, and identification and does not survive scrutiny. Even some proponents of the proposition recognize its shortcomings. As the OECD Secretariat recently observed, while some indicators suggest that, on average, market power is increasing, “it remains unclear precisely what is driving the increase in market power. It is perfectly possible that in many markets this is the outcome of healthy competitive forces

⁵ See, e.g., Timothy J. Muris, *Improving the Economic Foundations of Competition Policy*, 12 GEO. MASON L. REV. 1, 9–10 (2003) (“[A]lthough some industries appeared to have market structures favorable for the existence and exercise of substantial market power, the industries were, nonetheless, quite competitive. This research made clear that sound theory plus the details of markets and institutional factors are necessary to understand competition.”); Cristina Caffarra & Serge Moresi, *Issues and Significance Beyond US Enforcement*, MLEX MAG. Apr. – June 2010, at 41, 42–43 (2010) (“Most economists would agree that market shares and the HHI often are poor indicators of market power. . . . [T]he firms’ price-cost margins are often more direct and more precise indicators of market power than their market shares or HHI.”).

that allow ‘superstar firms’ to thrive and build market power on the back of their recurring success.”⁶

Part I of this comment separates and summarizes the three claims underlying calls for more stringent antitrust policy: (1) that aggregate industrial concentration is increasing in the United States at a worrisome rate; (2) that the increase in aggregate market concentration has resulted in less desirable outcomes for consumers and the economy as a whole; and (3) that it is the result of lax or ineffective merger enforcement. Part II highlights fundamental problems related to measurement. Antitrust policy inferences require information about antitrust markets, and aggregate data obscures market-level trends. Part III addresses the lack of identification in cross-sectional price- and profit-concentration studies. Similarly, cross-sectional studies relating aggregate concentration to economic performance do not provide a reliable empirical basis to support the inference that the United States economy has experienced a systematic increase in market power. Part IV briefly addresses claims that lax merger enforcement is a significant cause for the increase in concentration and related claims that increased antitrust enforcement can be used to combat rising economic inequality.

⁶ OECD Secretariat, Organisation for Economic Co-operation and Development (OECD), *Market Concentration Issues Paper*, at 4 (April 20, 2018), [https://one.oecd.org/document/DAF/COMP/WD\(2018\)46/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2018)46/en/pdf).

I. Separating Empirical Claims About Concentration, Outcomes, and Antitrust

It is important, as a logical matter, to identify separately the claims that have been made in the current debate. The first is the empirical observation that increases in aggregate concentration measures imply a meaningful reduction in competition in well-defined markets. The second is the claim that increases in aggregate concentration levels are sufficient to infer a causal relationship with poor economic performance. The third is the related claim that it is lax antitrust policy—and in particular, lax merger enforcement—that has caused both the increase in aggregate market concentration, if it exists, and the reduction in economic performance. Existing empirical support for each of these claims involves important and interesting work by economists that raises important questions.

The appropriateness and usefulness of that data and evidence turn on the specific assertion being tested. The first and third claims are decidedly empirical. The second—that one can presume a causal relationship between market concentration and economic performance—can certainly be tested empirically, and we review the existing evidence below. But the structural logic underlying the second claim has been the subject of a long debate in economic history. It is well known among industrial organization economists that changes in market concentration can increase or decrease competition. Even if we accept as true the initial premise that aggregate concentration is increasing at a worrisome rate, competition and concentration are distinct and require different measurement techniques. And if there has been a meaningful reduction in competition, it is less clear still

that antitrust policy is a significant cause; while our ability to measure individual cases has grown increasingly sophisticated, our ability to measure merger *policy* effectiveness has not.⁷

The essential difficulty in using market concentration as the starting point for discussions about the state of competition is that the relationship between market structure and competitive intensity is ambiguous.⁸ For that reason, the enforcement agencies cautiously use market concentration only as an imperfect indicator to form preliminary assessments of competitive intensity. It should be obvious then that aggregate measures of concentration are even less informative for the purposes of antitrust.

II. Antitrust Policy Inferences Require Analysis of Markets, Not Sectors

The contemporary perception that the United States economy faces a competition problem can likely be traced back to a 2015 White House Council of Economic Advisors (“CEA”) paper by Furman & Orszag.⁹ The United States uses the North American Industry Classification System (NAICS) for categorizing industries, and those categorizations are increasingly narrower at higher levels of specificity. The NAICS divides the economy into 24 2-digit sectors (e.g., broad sectors like “retail trade”), which are divided into 99 3-digit

⁷ Dennis Carlton, *Why We Need to Measure the Effect of Merger Policy and How to Do It*, 5 COMPETITION POLICY INT’L J. 77, 89 (2009).

⁸ See e.g., Harold Demsetz, *Industry Structure, Market Rivalry, and Public Policy*, 16 J.L. & ECON. 1 (1973); Harold Demsetz, *Two Systems of Belief About Monopoly*, in INDUSTRIAL CONCENTRATION: THE NEW LEARNING 164 (Harvey J. Goldshmid, H. Michael Mann & J. Fred Weston eds., 1974).

⁹ Furman & Orszag, *supra* note 2.

subsectors, 311 4-digit industry groups, 709 5-digit industries, and 1057 6-digit industries.

Furman & Orszag show a small increase in the CR50 (the combined market share of the 50 largest firms) calculated at the two-digit industry level to measure concentration.¹⁰ The authors go on to tentatively hypothesize that corporate consolidation, among other explanations, could be a contributing factor.¹¹ Similar but more conclusory studies followed.¹²

These aggregate measures of concentration completely obscure market-level information. An antitrust relevant “market” is composed of firms that impose significant competitive pressure upon one another. Under the United States Agencies’ Horizontal Merger Guidelines, “market definition focuses solely on demand substitution factors, i.e., on customers’ ability and willingness to substitute away from one product to another in response to a price increase or a corresponding non-price change such as a reduction in

¹⁰ Concentration ratios (CR) express the market share of the Nth largest firms in a market, industry, or economy. For instance, the CR4 denotes the combined market shares of the four largest firms.

¹¹ “Our only real conclusion is thus that more attention needs to be paid to what is driving firm-level trends in the United States, and in particular whether they reflect economic rents at the firm level.” Furman & Orszag, *supra* note 2, at 2.

¹² For example, *The Economist* also used highly aggregate concentration levels to describe changes in concentration in the United States, calculating the CR4 using 4-digit NAICS categorization. It found that across the 893 sectors measured, the weighted average CR4 increased from 26 percent in 1997 to 32 percent in 2012. *Business in America: Too Much of a Good Thing*, THE ECONOMIST (May 26, 2016), <https://www.economist.com/briefing/2016/03/26/too-much-of-a-good-thing>. More recently, Autor et al. took a somewhat different approach, analyzing the evolution of concentration across 676 industries using 4-digit SIC classifications under both CR4 and HHI measures. The authors found that, from 1982 to 2012, the CR4 grew 4 percent in service industries, 5 percent in manufacturing industries, 6 percent in the wholesale sector, 8 percent in utilities, 11 percent in financial services, and 15 percent in retail industries. David Autor, et al., *Concentrating on the Fall of the Labor Share*, 107 AM. ECON. REV.: PAPERS & PROC. 180 (2017), <https://economics.mit.edu/files/12544>.

product quality or service.”¹³ Unlike broadly defined industries (e.g., 2- and 4-digit SIC/NAICS level industry classifications) that describe entire national sectors like “Retail Trade” at the 2-digit NAICS level and “Bakeries and Tortilla Manufacturing” at the 4-digit NAICS level, antitrust product and geographic markets are often narrowly or locally defined. Compounding the issue is that reliable data for trends in market concentration is generally unavailable in the United States. Absent a well-defined market, market share statistics are largely meaningless for the purpose of measuring competitive intensity and certainly not appropriate for inferences about the intensity of competition across industries.

Indeed, the use of CR50 calculations in studies like Furman & Orszag’s implicitly acknowledges the presence of at least 50 competitive firms. Those observed trends may reflect nothing more than the expansion of efficient firms into related lines of business. Moreover, the CR50 measure is based on revenues reported on a national basis, obscuring trends in local markets. Even CR4 measures tell us little about competition—the increase in the CR4 identified by *The Economist* would correspond to a HHI of between 300 and 700.¹⁴ Antitrust enforcement agencies consider a market unconcentrated if its HHI is below 1500.

The gap between aggregate concentration measures and actual product markets is not just a theoretical issue, it is quite important in practice. In a recent paper, Gregory

¹³ U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES § 4 (2010).

¹⁴ Carl Shapiro, *Antitrust in a Time of Populism* INT’L J. INDUS. ORG. (forthcoming 2018) (manuscript at 14), <https://faculty.haas.berkeley.edu/shapiro/antitrustpopulism.pdf>.

Werden & Luke Froeb document the excessive aggregation in United States Census data and show how such aggregation masks changes in market concentration.¹⁵ First, Werden & Froeb demonstrate how “even the least aggregated Census data can be over a hundred times too aggregated.”¹⁶ The authors compare NAICS 6-digit industries to markets by calculating the Commerce Quotients¹⁷ for the relevant markets alleged in mergers complaints filed by the Justice Department from 2013-2015, omitting certain markets.¹⁸ The following figure is reproduced from Werden & Froeb’s study, and illustrates the five Commerce Quotients just above and just below the median:

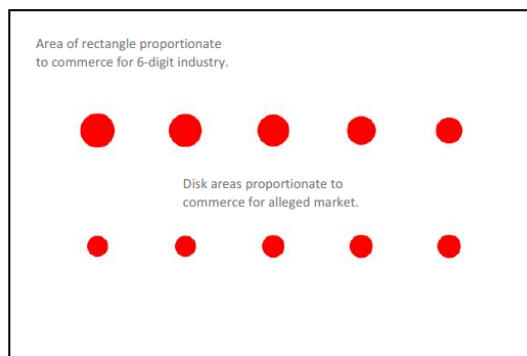


Figure 2. Medial Commerce Coefficients for NAICS 6-Digit Industries

¹⁵ Gregory J. Werden & Luke M. Froeb, *Don't Panic: A Guide to Claims of Increasing Concentration*, ANTITRUST MAGAZINE (forthcoming 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3156912.

¹⁶ *Id.*

¹⁷ Defined as the annual volume of commerce of the alleged relevant market divided by the value of industry shipments in the corresponding NAICS 6-digit industries.

¹⁸ Werden & Froeb, *supra* note 15 (omitting relevant markets where the Department’s investigation did not determine the volume of commerce or because alleged lessening of competition was on the buying side of the market).

The ratio of the area of each disk to the area of the black rectangle is the Commerce Quotient for the market corresponding to the disk.¹⁹ As the authors' visual demonstrates, studies like the one conducted by *The Economist* focus on what amounts to the rectangle rather than the disks.²⁰ Werden & Froeb go on to conduct a thought experiment that shows how such excessive aggregation can render observed concentration trends meaningless²¹ and can lead to fallacies associated with averaging.²² The authors conclude that increasing market concentration does not indicate whether antitrust reform is needed.

The limitations and crudeness of even *market* definition methodology and the market share calculations based upon it are widely acknowledged.²³ If we were to accept that *aggregate* concentration is increasing at a meaningful rate, the real questions of competition policy import remain whether competitive intensity has changed over time and, if so, why? Aggregate concentration measures certainly address neither question.

¹⁹ *Id.* at 5.

²⁰ *Id.*

²¹ The authors show that even though horizontal and vertical mergers have completely *different* effects on market concentration, they might have exactly the same effect on NAICS subsectors and industries. *Id.* at 7.

²² Subsector concentration can increase even if the concentration of every market in a subsector decreases. *Id.* at 9.

²³ See Dennis W. Carlton, *Market Definition: Use and Abuse*, 3 COMPETITION POLICY INT'L J. 3, 4 (2007) ("Although market definition, together with the calculation of market shares, is a crude methodology, if it is to be used, there are certain logical principles that one should follow. Otherwise, this methodology will become even cruder or, worse yet, misleading. Once one has defined a market, one must understand why market shares are a very imprecise way of characterizing competition and are, at most, the beginning point for an analysis, not an endpoint.")

III. Problems with Identification and Inference

The second empirical premise underlying proposals for more stringent merger policy is that increasing concentration has caused an increase in sustainable market power that has resulted in harm to consumers. The supporting evidence offered consists largely of outcome-focused cross-sectional studies relating changes in aggregate concentration to various economic performance indicators.

A fundamental problem with cross-sectional price- or profit-concentration studies is that they are often hindered by endogeneity and lack of identification. Basic economic theory shows that concentration could reflect a decline in competition, but could equally reflect the forces of competition at work.²⁴ Some firms are able to operate at a lower cost or produce a better product. As these firms grow in size, market concentration increases but average costs decrease or quality increases.²⁵ Thus, profits or quality-adjusted prices are positively related to concentration, but this tells us nothing about the likely effects of mergers.

Industrial organization economists have long been skeptical of claims of causal inference arising from cross-sectional studies.²⁶ Market structure is determined by market

²⁴ See, e.g., Harold Demsetz, *Industry Structure, Market Rivalry, and Public Policy*, 16 J.L. & ECON. 1, 1–3 (1973).

²⁵ *Id.*

²⁶ See, e.g., *id.*; William N. Evans, Luke M. Froeb & Gregory J. Werden, *Endogeneity in the Concentration-Price Relationship: Causes, Consequences, and Cures*, 41 J. INDUS. ECON. 431 (1993); T.F. Bresnahan, *Empirical*

specific characteristics, and entry and exit feeds back from performance to market structure.²⁷ Many of the existing price-concentration studies are not designed to effectively account for such endogeneity.

Relatedly, existing cross-sectional studies designed to analyze the movements of other indicators of competitive intensity do not support the inference that there has been a systematic increase in market power. For example, the exercise of monopoly power, by definition, requires a reduction of output and an increase in market prices. If competition has decreased over time, one would expect to observe an increase in market prices and a reduction in market output.

De Loecker & Eeckhout purport to show that markups have risen since 1980, and interpret this to suggest that there has been a rise in market power.²⁸ The authors observe measures of sales, input expenditure, capital stock information, industry activity classifications, and accounting data measuring profitability and stock market performance. The authors acknowledge that higher markups do not necessarily imply that firms are

Studies of Industries with Market Power, in 2 HANDBOOK OF INDUSTRIAL ORGANIZATION 1011 (Richard Schmalensee & Robert Willig eds., 1989); Richard Schmalensee, *Inter-Industry Studies of Structure and Performance*, in 2 HANDBOOK OF INDUSTRIAL ORGANIZATION 951 (Richard Schmalensee & Robert Willig eds., 1989).

²⁷ See, e.g., Evans, Froeb & Werden, *supra* note 15.

²⁸ Jan De Loecker & Jan Eeckhout, *The Rise of Market Power and the Macroeconomic Implications* 5 (2017), <http://www.janeeckhout.com/wp-content/uploads/RMP.pdf>.

earning higher profits.²⁹ This is particularly the case if “the source of the increase in markups is technological change that reduces variable costs, and the same technological change increases the fixed costs.”³⁰

An increase in markups alone is not sufficient to identify increased market power.³¹ Higher markups are consistent with several explanations other than increased market power. Some examples include increased fixed cost investments for new technology, increased product differentiation within a market, or an economy-wide shift towards lower marginal cost products or services. In any case, much of the increase in markups that De Loecker & Eeckhout pick up on comes from expanded international sales, which in no way indicates that there is not enough competition in US product markets.³²

More recent studies cast further doubt on De Loecker & Eeckhout’s findings. Traina argues that De Loecker & Eeckhout focus only on the cost of goods sold (COGS) component of firms’ operating expense (OPEX), ignoring the selling, general, and administrative expenses (SGA) component. COGS measures direct inputs to production, such as materials and most of labor, while SGA measures indirect inputs to production,

²⁹ *Id.* at 14.

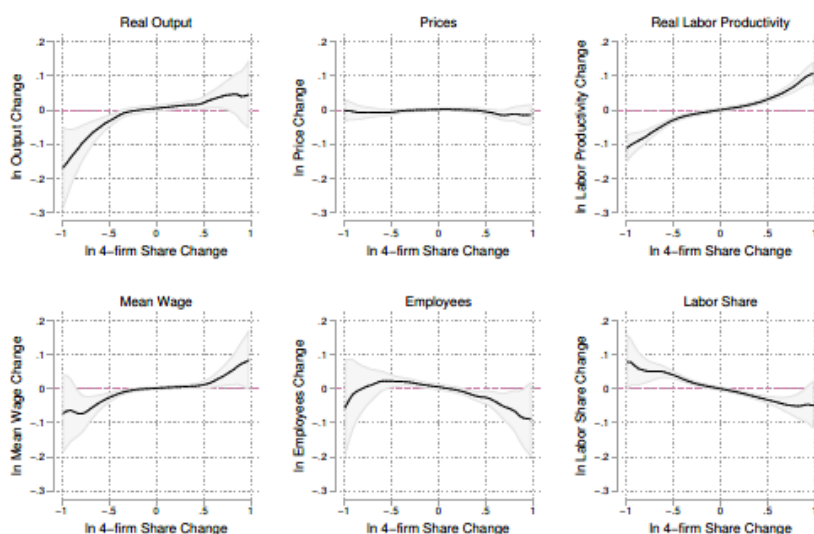
³⁰ *Id.*

³¹ See e.g., Robert H. Bork & J. Gregory Sidak, *The Misuse of Profit Margins to Infer Market Power*, 9 J. COMPETITION L. & ECON. 511 (2013).

³² Thank you to Dennis Carlton for this observation.

especially marketing and management.³³ Traina demonstrates that SGA is an increasingly important share of variable costs for firms in the United States economy.³⁴ When SGA (e.g., marketing and management) is included in De Loecker & Eeckhout’s measure of variable cost (i.e., total operating expense is used as a measure of variable cost rather than COGS) market power is shown to either remain flat or decline.³⁵ Additionally, using a methodology similar to De Loecker and Eeckhout, Ganapati demonstrates that industry concentration is positively correlated with productivity and real output, but is uncorrelated with price changes.³⁶ His results are reproduced here:

Figure 2: Correlation of Economic Outcomes to Market Concentration



³³ James Traina, *Is Aggregate Market Power Increasing? Production Trends Using Financial Statements* 9 (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3120849.

³⁴ *Id.*

³⁵ *Id.* at 7.

³⁶ Sharat Ganapati, *Oligopolies, Prices, Output, and Productivity* (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3030966.

Others have asserted the more focused claim that the increase in concentration can be traced to a handful of large firms. Hall tests this view and finds no evidence that mega-firm-intensive sectors have higher price/marginal cost markups.³⁷ In fact, Hall presents evidence that while there is no real trend in markups for manufacturing, there is a strong trend of growing markups in the Finance & Insurance and Health Care & Social Assistance Industries—both of which are heavily regulated.³⁸

Again, caution is appropriate in relying upon any aggregate measures of concentration and performance to generate inferences about competitive intensity regardless of results. However, the fact that the signature outcome from a rise in market power—the simultaneous increase in prices and decrease in output—is missing, gives one serious pause in interpreting the evidence in favor of the view that economic performance in the United States has declined as a result of a rise in market power.

Existing studies do not offer sufficient empirical basis from which to conclude that market power is rising in the first instance, let alone that concentration is a significant cause. To the extent that markups are increasing, other studies show that output has increased and that quality-adjusted prices have remained stable. More fundamentally, aggregate

³⁷ Though he does find some evidence that markups grew in sectors with rising mega-firm intensity. Robert E. Hall, *New Evidence on the Markup of Prices over Marginal Costs and the Role of Mega-Firms in the US Economy* 20 (2018), <https://web.stanford.edu/~rehall/Evidence%20on%20markup%202018>.

³⁸ *Id.* at 15.

price-concentration studies are not adequate to make reliable inferences about the intensity of competition or the desirability of changes in merger policy because they ignore dynamic and market specific realities.

IV. Premature Calls for Increased Merger Enforcement

Notwithstanding these critical errors related to measurement and a lack of identification, proponents of more aggressive merger policy point towards lax or ineffective antitrust enforcement as the cause of increased concentration and the corresponding asserted decline in economic performance.³⁹ After drawing a link between increasing concentration and decreasing economic performance, the assertion is fairly intuitive—horizontal mergers increase market concentration, and horizontal merger enforcement has become more lenient. Merger retrospectives are relied upon to support this theory. Taken in isolation a merger retrospective focuses on a single transaction and cannot be used to validate the more general claim that overall merger policy is too lax. But, where multiple merger retrospectives tend to show the same negative outcomes for consumers, they are leveraged by those that support stricter merger enforcement policy.

³⁹ See, e.g., Amanda Novello & Jeff Madrick, *Government Fails to Adequately Address Industry Concentration*, CENTURY FOUND. (Oct. 27, 2017), <https://tcf.org/content/commentary/government-fails-adequately-address-industry-concentration> (“Explosive inequality in America is linked to increasing rents, or “beyond-normal profits,” of top firms...[Furman & Orszag, 2015] show that these returns accrue disproportionately to already well-off firms.”); Eduardo Porter, *With Competition in Tatters, the Rip of Inequality Widens*, N.Y.TIMES, (Jul. 12, 2016) (“There is plenty of evidence that corporate concentration is on the rise...[Furman & Orszag, 2015] report that between 1997 and 2007 the market share of the 50 largest companies increased in three-fourths of the broad industry sectors followed by the census.”).

John Kwoka's analysis in, *Mergers, Merger Control, and Remedies*,⁴⁰ is cited by many in support of the notion that modern antitrust enforcement has failed to prohibit mergers that reduce consumer welfare.⁴¹ Michael Vita & David Osinski offered a critical review.⁴² The authors, both experienced antitrust economists of the Bureau of Economics at the FTC, raise several objections to Kwoka's methodology. For example, Kwoka's analysis does not use standard meta-analytic⁴³ techniques for computing average price effects and standard errors of the studies in the sample.⁴⁴ The observations are not weighted by their estimated variances, which leads to all price effects estimates being treated equally regardless of precision of the estimates.⁴⁵ The estimated average price effects also appear to lack standard errors, which makes it impossible to evaluate whether those effects are

⁴⁰ JOHN KWOKA, *MERGERS, MERGER CONTROL, AND REMEDIES* (2015).

⁴¹ See Markus Dertwinkel-Kalt & Christian Wey, *Evidence Production in Merger Control: The Role of Remedies* 5 (Düsseldorf Inst. Competition Econ., Discussion Paper No. 217, 2016), <http://hdl.handle.net/10419/130192> ("Kwoka present[s] empirical evidence for the EU and the US which questions whether remedies effectively counter anti-competitive merger effects."); F. David Osinski & Jeremy A. Sandford, *Merger Remedies: A Retrospective Analysis of Pinnacle/Ameristar* (2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3008770 ("Kwoka provides an extensive summary of agency enforcement actions, finding that remedies imposed are generally inadequate in preserving competition."); Shapiro, *supra* note 14, at 22 ("[E]vidence from U.S. merger retrospectives supports a shift to a moderately stricter merger enforcement policy." (citing KWOKA, *supra* note 40)).

⁴² Michael Vita & David F. Osinski, *John Kwoka's Mergers, Merger Control, and Remedies: A Critical Review*, 82 ANTITRUST L.J. 361 (2018)

⁴³ *Id.* at 361 n.3 ("Meta-analysis is a method for systematically combining quantitative findings from multiple studies to develop a finding that has greater statistical power than any of the individual studies alone.")

⁴⁴ *Id.* at 363.

⁴⁵ *Id.*

statistically different from zero.⁴⁶ These objections on methodology are central to the critique of Kwoka's study, as it prevents the estimation of an average price effect in the meta-analysis. While the average price change that Kwoka shows is 7.22 percent, the median price change is less than 1 percent,⁴⁷ indicating some significant outliers.

Kwoka published a response to these critiques in 2017,⁴⁸ to which Vita offered another rejoinder.⁴⁹ In the most recent paper, Vita ultimately calls upon Professor Kwoka to make the data and details of his analysis public so that the robustness of his calculations can be tested. The reality is that no matter how many merger retrospective studies are conducted, when the sole focus is on market data pre- and post-merger, we gain little if any insight concerning the design of merger policy. If we want to know if the agencies are successfully analyzing mergers, we need better access to data not only on merger outcomes, but also about the agency's ex-ante predictions.⁵⁰

⁴⁶ *Id.*

⁴⁷ KWOKA, *supra* note 40, at 95.

⁴⁸ John Kwoka, *Mergers, Merger Control, and Remedies – A Response to the FTC Critique*, ANTITRUST L.J. (forthcoming 2018), <https://www.antitrustinstitute.org/sites/default/files/Kwoka%20Response%20to%20FTC%20Critique%20of%20MMCR.pdf>.

⁴⁹ Michael Via, *Kwoka's Mergers, Merger Control, and Remedies: Rejoinder to Kwoka* (August 2018), https://www.ftc.gov/system/files/documents/biographies/michael-g-vita/vita_rejoinder_to_kwoka_1.pdf.

⁵⁰ The appropriate question in analyzing overall policy effectiveness is whether an agency's analysis of merger is *systematically* biased. "Only . . . by combining a record of what tools were used and what conclusions were drawn from each tool with a study of observed outcomes from mergers . . . can systematic evidence be collected on the efficacy of various methods used in merger review." Dennis Carlton, *Revising the Horizontal Merger Guidelines*, 6 J. COMPETITION L. & ECON. 619, 651 (2010). *See also* Dennis Carlton, *Why We Need to Measure the Effect of Merger Policy and How to Do It*, 5 COMPETITION POLICY INT'L J. 77 (2009); Joshua D.

Finally, there are related calls for increased merger enforcement to combat a perceived rise in economic inequality. The fundamental contention is that the growth of large firms with high market shares is increasing concentration, which is in turn decreasing competition and driving inequality. Furman (2018) notes that rising concentration contributes both to “rent sharing,” whereby increasingly disparate firm success translates into disparate wages, and increased employer leverage, which leads to a reduction in wages in part because workers have fewer choices and thus less ability to bargain for wage increases.⁵¹ Others have argued that increased market power has caused a decrease in corporate investment⁵² and a fall in labor’s share of income.⁵³ The discussion is not limited to scholarly debate. There are a number of advocates from the political sphere, epitomized in the Democratic Party’s 2017 “Better Deal” economic platform.⁵⁴

Wright, *Towards a Better Understanding of Concentration: Measuring Merger Policy Effectiveness* OECD (2018), [https://one.oecd.org/document/DAF/COMP/WD\(2018\)69/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2018)69/en/pdf).

⁵¹ Jason Furman, *Market Concentration – Note* (2018), [https://one.oecd.org/document/DAF/COMP/WD\(2018\)67/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2018)67/en/pdf).

⁵² German Gutierrez & Thomas Philippon, *Investment-less Growth: An Empirical Investigation* (2016), <http://www.nber.org/papers/w22897.pdf> (arguing that US corporate investment is down as a result of increased concentration and increased common ownership).

⁵³ See, e.g., David Autor, David Dorn, Lawrence F. Katz, Christina Patterson & John Van Reenen, *The Fall of the Labor Share and the Rise of Superstar Firms* (2017), <https://economics.mit.edu/files/12979> (arguing that although there has been little change in the labor share at the average firm, activity has shifted towards those firms with lower labor shares of income).

⁵⁴ One of the platform proposals is to “crack down on corporate monopolies and the abuse of economic and political power,” by preventing “big mergers that would harm consumers, workers, and competition,” stating that “extensive concentration of power in the hands of a few corporations hurts wages, undermines job growth, and threatens to squeeze out small businesses, suppliers, and new, innovative competitors.” <https://abetterdeal.democraticleader.gov/the-proposals/crack-down-on-abuse-of-power>.

While many assume an inverse relationship between antitrust enforcement activity and economic inequality, we are aware of only one study that tests that proposition empirically. In a forthcoming paper, Klick & Wright find no systematic relationship between current and past enforcement measures and any metrics of inequality.⁵⁵ The authors acknowledge that more sophisticated identification strategies and research designs might produce different results, but such studies are yet to be conducted.

Because current empirical evidence cannot be used to identify a causal relationship between market concentration and economic performance, any discussion about whether merger policy should be tightened or relaxed from current levels is premature.

Conclusion

In order to understand the strength of competition, one must know the strength of the competitive constraints upon each participating firm within a defined market. Understanding those constraints requires knowledge about product substitutability and barriers to entry and requires rigorous economic analysis. While it would be incredibly valuable for policymakers to track and compare the competitive intensity of an entire economy over time, it is not practically possible.⁵⁶ Measures of market concentration can be

⁵⁵ Jonathan Klick & Joshua D. Wright, *Antitrust Enforcement and Inequality* (forthcoming 2018).

⁵⁶ An observation recently made by the OECD Secretariat. OECD Secretariat, Organisation for Economic Co-operation and Development (OECD), *Market Concentration Issues Paper*, at 4–5 (April 20, 2018), [https://one.oecd.org/document/DAF/COMP/WD\(2018\)46/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2018)46/en/pdf).

used with extreme caution as a crude, initial indicator of market power, but aggregate measures of sector concentration have no place in antitrust analysis.

Instead, in order to identify changes in market power we must look to other (still imperfect) indicators of competitive intensity—changes in output, price, markups, etc. The current body of empirical studies cannot be reconciled to reliably infer a widespread rise in market power. Moreover, many of the studies are not designed to appropriately account for lack of identification.

But empirical studies can be just as valuable for showing us what we do not know. Our own history teaches that when antitrust is detached from empirical evidence and determined by amorphous standards, it invites rent seeking and promotes corporate welfare over consumer welfare. Antitrust laws are not designed to promote particular outcomes, but to curtail anticompetitive practices that interfere with competitive market processes.⁵⁷ The competitive process aligns the incentives of firms with those of consumers; if one firm does not offer consumers high quality, low-priced goods, consumers can turn to

⁵⁷ See Michael D. Whinston, LECTURES ON ANTITRUST ECONOMICS 1 (2006) (“Regulation tends to be industry-specific and to involve the direct setting of prices, product characteristics, and entry, usually after regular and elaborate hearings. By contrast, antitrust law tends to apply quite broadly, and focuses on maintaining certain basic rules of competition that enable the competitive interaction among firms in the marketplace to produce ‘good’ outcomes.”); Frank H. Easterbrook, *Antitrust and the Economics of Federalism*, 26 J. L. & ECON. 23, 24 (1983) (“The antitrust laws, in contrast, are designed to preserve the functioning of competitive markets that, at least presumptively, produce allocative efficiency.”).

a rival who will.⁵⁸ It may well be the case that concerns with concentration happened to shed light on a separate market power issue for which antitrust is an appropriate remedy. However, that theory requires a significant amount of further empirical study before any discussion about recalibration of competition policy is appropriate. As for other legitimate concerns that have been raised in the concentration debate, including concerns with growing economic inequality, antitrust is not the appropriate tool and can cause more harm than good.

⁵⁸ See Luke M. Froeb, Deputy Assistant Attorney General for Economics, U.S. Dep't of Justice, Luncheon Keynote Address at the 21st George Mason Law Review Antitrust Symposium (Feb. 16, 2018), <https://vimeo.com/256518043>.