

2018

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Hovenkamp, Herbert J. and Shapiro, Carl, "Horizontal Mergers, Market Structure, and Burdens of Proof" (2018). *Faculty Scholarship*. 1932.
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THE YALE LAW JOURNAL

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Horizontal Mergers, Market Structure, and Burdens of Proof

ABSTRACT. Since the Supreme Court's landmark 1963 decision in *United States v. Philadelphia National Bank*, antitrust challengers have mounted prima facie cases against horizontal mergers that rest on the level and increase in market concentration caused by the merger. Proponents of the merger are then permitted to rebut by providing evidence that the merger will not have the feared anticompetitive effects. Although the means of measuring that concentration as well as the triggering levels have changed over the last half century, this basic approach has remained intact. This longstanding structural presumption has been critical to effective merger enforcement. In this Feature, we argue that the structural presumption is strongly supported by economic theory and evidence and suggest some ways to further strengthen it. We also respond to those who would weaken or eliminate it. Our analysis applies to the modern legal landscape, where the promotion of competition and the protection of consumer welfare are considered the purpose of merger enforcement.

We also consider a promising recent legislative proposal that aims to strengthen and expand the structural presumption. In particular, we suggest that the proposal can be improved so as to strengthen merger enforcement, primarily by facilitating the government's establishment of its prima facie case, while staying true to the fundamental goal of antitrust to promote competition.

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INTRODUCTION

Since the Supreme Court's landmark merger decision in *United States v. Philadelphia National Bank*,¹ challengers have mounted prima facie cases against horizontal mergers that rest on the level and increase in market concentration caused by the merger. For example, in the *Heinz* baby food case, the D.C. Circuit enjoined a merger of two manufacturers who each had more than 15% of the market and were the second- and third- largest competitors in the industry.² The merger would have doubled the size of the second largest firm and created a market dominated by just two firms, one with a 65% market share and the other with more than 30%. Those facts about both the increase in concentration that the merger produced and the resulting overall concentration were sufficient for prima facie illegality. When such a prima facie case has been made, the merging parties can then rebut this structural presumption by showing that the market shares do not accurately predict competitive effects. Generally, they do this by making one of three showings: first, that the proposed market is poorly defined or that market shares exaggerate the merger's anticompetitive potential;³ second, that entry into the market will discipline any price increase;⁴ or third, that the merger produces offsetting efficiencies sufficient to keep prices at premerger levels or otherwise counteract any anticompetitive effects.⁵

This *Philadelphia National Bank* burden-shifting approach has been critical for effective horizontal merger enforcement by the Department of Justice (DOJ) and the Federal Trade Commission (FTC). While the technical analysis of markets and the size of the relevant numbers have shifted somewhat over time, the basic structural presumption and burden-shifting framework remain alive and well.⁶ We strongly support the application of the structural presumption in merger cases and suggest in this Feature how to broaden the set of situations in which the presumption operates.

Our approach is highly pragmatic: given that horizontal merger enforcement is typically a predictive exercise that is conducted after mergers are proposed but before they are consummated, what facts can the government realistically establish in court? We argue that considerable uncertainty is the norm, as to both the

1. 374 U.S. 321 (1963).

2. *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 711-12, 727 (D.C. Cir. 2001).

3. See *infra* notes 53-57 and accompanying text.

4. See 4 PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶ 941 (4th ed. 2016).

5. 4A PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶¶ 970-76 (4th ed. 2016).

6. For a robust defense of the use of presumptions in merger analysis, see Steven C. Salop, *The Evolution and Vitality of Merger Presumptions: A Decision-Theoretic Approach*, 80 *ANTITRUST L.J.* 269, 276-78 (2015).

likely competitive effects of the merger and the specific manner in which those effects will manifest in the market. We thus embrace the structural presumption for very practical reasons, notwithstanding certain valid criticisms regarding market definition. Ultimately, we argue that market shares are often highly informative, despite the fact that one can measure market shares only after the messy process of defining the relevant market. In addition, the structural presumption is rebuttable.

Two important economic ideas underlie the structural presumption. First, the loss of a significant competitor in a concentrated market will likely enhance market power. Second, significant entry barriers often exist in concentrated markets. The Chicago School and other critics have challenged both of these economic ideas over the past half century.⁷ These fundamental principles remain valid as bases for the burden-shifting approach of the structural presumption. Both ideas find strong support in how companies themselves formulate and execute competitive strategy – and indeed in how they evaluate proposed mergers and select merger partners. In contrast, the Chicago School's views that small firms are just as effective competitors as large firms and that entry will typically and promptly occur in response to prices modestly above competitive levels find much less empirical support. Importantly, if those conditions do apply in particular markets, the structural presumption can be rebutted with industry-specific evidence.

Our response to those who criticize the structural presumption because of its reliance on market definition is threefold. First, we suggest that the courts, whenever practical, should assess whether the market shares that underlie the government's structural presumption are sensitive to the precise boundaries of the relevant market. If not, then many of the criticisms based on market definition melt away, and the structural presumption deserves greater weight. If the market shares are sensitive to market definition, then the court should ask which set of market shares more accurately reflects the likely competitive effects of the proposed merger for the overlap products. Direct evidence of the likely competitive effects, such as the extent of direct competition between the merging parties, will be important for this purpose. However, the fact that the market shares

7. *E.g.*, ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 221 (1978) (largely denying the existence of any relationship between market structure and competitive performance, provided that the market contains at least two firms); *id.* at 310-29 (largely denying the existence of entry barriers, with the exception of competitive prices). On other members of the Chicago School who shared these views, see Herbert Hovenkamp, *Whatever Did Happen to the Antitrust Movement?* (Univ. of Pa. Law Sch. Inst. for Law & Econ., Research Paper No. 18-7, 2018), http://ssrn.com/abstract_id=3097452 [<http://perma.cc/MG7X-62W5>].

vary with the boundaries of the market does not make those shares uninformative or require the abandonment of market definition altogether.

Second, the government should be entitled to the structural presumption if the merger causes the requisite increase in concentration in *any* properly defined relevant market. Even if the defense can identify an alternative relevant market (whether broader or narrower) in which the level or increase in concentration is insufficient to trigger the structural presumption, that showing does not negate or rebut the presumption. This observation is especially important because the accepted method of defining relevant markets in horizontal merger cases, namely the hypothetical monopoly test (HMT), generally leads to relatively narrow markets.⁸ Under the HMT, a group of products is tested as a “candidate market” to determine whether it qualifies as a relevant antitrust market. Any candidate market for which the court concludes that a perfectly functioning cartel would lead to a significant price increase qualifies as a relevant market. The objection that the merger leads to only a modest increase in concentration in some broader market is not responsive, so long as the market identified by the challenger satisfies the HMT. As we note below, this is particularly pertinent in unilateral effects analysis.⁹

Third, we argue that in some cases the government should be able to prevail *without* invoking the structural presumption, at least as commonly stated, based on a more direct showing of the likely competitive effects of the proposed merger. As a result, market definition need not always be a gating factor for the government. This is especially true in cases where it is unclear which relevant market would be the most informative regarding the merger’s likely competitive effects. Allowing this route for the government would harmonize horizontal merger law with other areas of antitrust law, where the courts have shown an increasing willingness to look at *direct evidence* of the likely effect of challenged conduct, relying less on indirect evidence based on a firm’s market share.¹⁰ We also consider briefly whether the existing statutory language permits an approach that avoids market definition altogether.¹¹

We also discuss how the courts should evaluate evidence of market structure alongside more direct evidence of likely competitive effects. In cases in which the

8. See, e.g., Joseph Farrell & Carl Shapiro, *Improving Critical Loss Analysis*, ANTITRUST SOURCE 12 n.42 (Feb. 2008), <http://pdfs.semanticscholar.org/fa95/8d2f5b986c8108b98724da53a6e5df69c18c.pdf> [<http://perma.cc/RG7L-W65Z>].

9. See *infra* Part III.

10. E.g., *FTC v. Actavis, Inc.*, 133 S. Ct. 2223, 2237 (2013) (permitting market power to be inferred from a large exclusion payment).

11. See *infra* notes 87-98 and accompanying text.

government alleges effects arising solely due to the loss of direct competition between the two merging firms, so-called “unilateral effects,” alternative metrics such as diversion ratios or upward pricing pressure can complement and supplement the more traditional measures of market shares and the Herfindahl-Hirschman Index (HHI) without necessarily displacing them.¹² In cases in which the government alleges coordinated effects, the role of market definition and concentration measures such as the HHI is much more fundamental.

Part I explains that considerable economic evidence supports the proposition that a merger combining two firms with substantial market shares in a concentrated market is likely to reduce competition and harm customers. This evidence has strengthened over the past ten to twenty years, as economies of scale have become more significant in many industries. This shift, primarily driven by technological change, further strengthens the economic basis for the structural presumption, because firms with small market shares and new entrants are less likely to be as effectively competitive as firms that have proven their capabilities by achieving a substantial market share. Part II argues that the structural presumption is deeply established in the case law and has been a central element of the Horizontal Merger Guidelines for a full fifty years. Part II further explains how the DOJ and the FTC can use the structural presumption more aggressively under existing case law. We also respond to those who would weaken or eliminate the structural presumption. Part III discusses how the structural presumption can most effectively be applied in cases where loss of direct competition between the merging firms, i.e., with unilateral effects, is the primary concern.¹³

Part IV relates the structural presumption to the fundamental goal of anti-trust law and policy. The structural presumption and the associated burden-shifting framework, as they have developed over the past fifty years, rely on the assumption that the goal of merger policy is to promote “consumer welfare” by protecting consumers against high prices or reduced output, product variety, product quality, or innovation. Our analysis in Parts I, II, and III assumes that the goal of merger enforcement policy is to promote consumer welfare. As we use this term, applying the “consumer welfare” standard means that a merger is

12. The HHI is a widely used index of market concentration, measured as the sum of the squares of the market shares of all firms in the market. On the use of diversion ratios and upward pricing pressure in merger analysis based on unilateral effects, see Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 ANTITRUST L.J. 701, 712-33 (2010).

13. As distinct from unilateral effects, “coordinated effects” involve harm to competition arising from coordination between the merged firm and its remaining rivals. See U.S. DEP’T OF JUSTICE, 2010 HORIZONTAL MERGER GUIDELINES 20-27, <http://www.justice.gov/sites/default/files/atr/legacy/2010/08/19/hmg-2010.pdf> [<http://perma.cc/VWP7-JQRM>] [hereinafter 2010 MERGER GUIDELINES].

judged to be anticompetitive if it disrupts the competitive process and harms trading parties on the other side of the market.¹⁴ If the goal were something else, such as deterring industrial concentration to control corporate political power or protecting small firms from larger competitors, then the structural presumption would be viewed differently or might not apply at all.

Finally, in Part V, we briefly consider a legislative proposal that aims to strengthen and expand the structural presumption. We offer some guidance concerning how this proposal could be improved so as to strengthen merger enforcement, in part by making it easier for the government to establish its prima facie case.

I. THE ECONOMIC CASE FOR THE STRUCTURAL PRESUMPTION

The structural presumption is rooted in empirical evidence indicating that more concentrated markets tend to have higher prices and higher price-cost margins, all else equal. During the 1970s and 1980s, that evidence came to be seen as less convincing, leading to a weakening of the structural presumption. Nonetheless, the economic case for the structural presumption remains strong, and the most recent economic evidence supports a strengthening of the presumption.

The empirical origins of the structural presumption can be traced back to the 1950s. Building on the work of Joe S. Bain, industrial organization economists began to devote considerable attention to the empirical relationship between various measures of market structure and market performance.¹⁵ The resulting literature of interindustry studies found that more concentrated industries tended to perform poorly in serving consumers, displaying higher prices, higher price-cost margins, and higher profits than less concentrated industries.¹⁶

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14. These trading parties may be final consumers or businesses purchasing intermediate goods. They also may be suppliers such as workers or farmers who are harmed by the loss of competition when two large buyers merge. See Ioana Marinescu & Herbert Hovenkamp, *Anticompetitive Mergers in Labor Markets* (Univ. of Pa. Law Sch. Inst. for Law & Econ., Research Paper No. 18-8, 2018), http://ssrn.com/abstract_id=3124483 [<http://perma.cc/9GFV-9MSB>]. For further discussion of the meaning and interpretation of the consumer welfare standard, see Carl Shapiro, *The Consumer Welfare Standard in Antitrust: Outdated, or a Harbor in a Sea of Doubt?*, HAAS SCH. BUS. (Dec. 13, 2017), <http://faculty.haas.berkeley.edu/shapiro/consumerwelfarestandard.pdf> [<http://perma.cc/E3EZ-K6TW>].
 15. See JOE S. BAIN, *BARRIERS TO NEW COMPETITION: THEIR CHARACTER AND CONSEQUENCES IN MANUFACTURING INDUSTRIES* (1956). Prior to Bain's work, most empirical research in industrial organization involved case studies of specific industries.
 16. Richard Schmalensee, *Inter-Industry Studies of Structure and Performance*, in 2 *HANDBOOK OF INDUSTRIAL ORGANIZATION* 951 (Richard Schmalensee & Robert D. Willig eds., 1989); see also

These research results greatly influenced legal thinking about antitrust during the 1960s. For example, in his important 1960 article on mergers, Derek Bok observed that “lawyers have . . . learned that, within a market, changes in the number and relative size of firms are among the most important determinants of competition and monopoly.”¹⁷ In *United States v. Philadelphia National Bank*, decided in 1963, the Supreme Court similarly concluded that the principle that “[c]ompetition is likely to be greatest when there are many sellers, none of which has any significant market share,” was “common ground among most economists, and was undoubtedly a premise of congressional reasoning about the antimerger statute.”¹⁸

The additional cases of *Brown Shoe*¹⁹ and *Von's Grocery*,²⁰ as well as the 1968 Merger Guidelines,²¹ represented the high-water marks for merger enforcement based on measures of market concentration. In *Brown Shoe*, the Supreme Court, relying heavily on its view that Congress intended to halt consolidation in its incipiency, stated, “If a merger achieving 5% control were now approved, we might be required to approve future merger efforts by Brown’s competitors seeking similar market shares. The oligopoly Congress sought to avoid would then be furthered and it would be difficult to dissolve the combinations previously approved.”²²

Likewise, in *Von's Grocery*, the Court enjoined a merger between two grocery retailers with a combined share of 7.5% in the Los Angeles market.²³ Noting these shares and the many acquisitions that had taken place in that market, the Court found the merger violated Section 7.²⁴ Reflecting these decisions by the Court, the 1968 Merger Guidelines placed great emphasis on the overall “[m]arket structure” as the “focus” of the DOJ’s query.²⁵ Those Guidelines identified

Leonard W. Weiss, *The Concentration-Profits Relationship and Antitrust*, in *INDUSTRIAL CONCENTRATION: THE NEW LEARNING* 184, 184-233 (Harvey J. Goldschmid et al. eds., 1974).

17. Derek C. Bok, *Section 7 of the Clayton Act and the Merging of Law and Economics*, 74 HARV. L. REV. 226, 238 (1960).
18. 374 U.S. 321, 363 (1963) (footnote omitted) (quoting Comment, “Substantially To Lessen Competition . . .”: *Current Problems of Horizontal Mergers*, 68 YALE L.J. 1627, 1638-39 (1959)).
19. *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962).
20. *United States v. Von's Grocery Co.*, 384 U.S. 270 (1966).
21. U.S. DEP’T OF JUSTICE, 1968 MERGER GUIDELINES 1 (2015) [hereinafter 1968 MERGER GUIDELINES], <http://www.justice.gov/sites/default/files/atr/legacy/2007/07/11/11247.pdf> [<http://perma.cc/49M6-M8JU>].
22. *Brown Shoe*, 370 U.S. at 343-44.
23. *Von's Grocery*, 384 U.S. at 272.
24. *Id.*
25. 1968 MERGER GUIDELINES, *supra* note 21, at 1.

two overall market concentration levels and merging firm market shares that would “ordinarily” trigger a challenge.²⁶ In “highly concentrated” markets, those with a four-firm concentration ratio (CR4) exceeding 75%, the DOJ would challenge a merger if each firm had a premerger market share exceeding 4%.²⁷ For a firm with a share of 10%, the government would challenge the acquisition of a firm with a share of at least 2%.²⁸ In less highly concentrated markets, the DOJ would challenge a merger if each firm had a premerger market share exceeding 5%; if the acquiring firm’s share was 10%, the government would challenge the acquisition of a firm with a share of at least 4%.²⁹ Further, the 1968 Merger Guidelines followed *Brown Shoe* in applying harsher scrutiny if the market had exhibited a “trend toward increased concentration.”³⁰

In 1982, the Merger Guidelines were updated to apply a dramatically less strict structural presumption than that found in the 1968 Merger Guidelines. The 1982 Merger Guidelines considered markets unconcentrated if the HHI was below 1,000, moderately concentrated if the HHI was between 1,000 and 1,800, and highly concentrated if the HHI was above 1,800.³¹ They stated that the government was “likely to challenge mergers” that raised the HHI by at least 100 points and led to a postmerger HHI of more than 1,800.³² The 10% plus 4% merger that would have triggered a challenge under the 1968 Merger Guidelines would cause the HHI to rise by only eighty points and thus would not create a presumption under the 1982 Merger Guidelines, regardless of the shares of the other firms.

During the 2010 update of the Guidelines, the set of mergers that trigger the structural presumption was reduced further to reflect actual agency practice. These Guidelines define markets to be highly concentrated if the HHI is greater

26. *Id.* at 6.

27. *Id.*

28. *Id.*

29. *Id.*

30. *Id.* at 6-7. The idea of increased scrutiny in antitrust cases where the industry in question had exhibited a trend toward concentration first appeared in an exclusive dealing decision. *See Standard Oil Co. of Cal. v. United States*, 337 U.S. 293, 315 n.1 (1949) (Douglas, J., dissenting). It migrated to merger law in *Brown Shoe Co. v. United States*, 370 U.S. 294, 332-34 (1962), which identified the concern in the legislative history of the 1950 amendments to Section 7. *See also United States v. Von’s Grocery Co.*, 384 U.S. 270, 277-78 (1966); *United States v. Phila. Nat’l Bank*, 374 U.S. 321, 325, 331, 363 (1963).

31. U.S. DEP’T OF JUSTICE, 1982 MERGER GUIDELINES 13 (2015) [hereinafter 1982 MERGER GUIDELINES], <http://www.justice.gov/sites/default/files/atr/legacy/2007/07/11/11248.pdf> [<http://perma.cc/6EG3-Y3TL>].

32. *Id.* at 14-15.

than 2,500, and then apply the following structural presumption: “Mergers resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power.”³³ For example, in a market with five 20% firms, a merger between two of those firms would raise the HHI from 2,000 to 2,800, triggering the presumption. However, in a market with four 20% firms and two 10% firms, a merger between a 20% firm and a 10% firm would not trigger the presumption: the HHI would increase from 1,800 to 2,200, so the postmerger market would be only moderately concentrated. Following the Guidelines, such a merger might “warrant scrutiny,” but it would not be presumed to be likely to enhance market power.³⁴

What explains these revisions to the structural presumption in the Guidelines? A major explanation is changes in economic thinking over the last fifty years. Steven Salop argues that “this evolution to a weaker presumption based on market shares and concentration is consistent with and was likely caused by the parallel evolution of economic analysis.”³⁵ In particular, many scholars questioned the quality of the data and the econometric methods used by the interindustry studies that demonstrated a relationship between concentration and profits.³⁶ The relationship between concentration and profitability was shown to be statistically weak and unstable over time.³⁷

However, important findings relating market structure to performance remain valid. In particular, the empirical evidence shows a positive relationship between seller concentration and prices or price-cost margins. On this point, Richard Schmalensee reported that “[i]n cross-section comparisons involving markets in the same industry, seller concentration is positively related to the level of price.”³⁸ Such intraindustry comparisons are especially relevant for merger control policy and are often used in merger analysis.³⁹ Michael Salinger reached the same conclusion as Schmalensee in his own review of the evidence on the relationship between market concentration and price-cost margins, stating, “the inappropriate inferences used to justify an active antitrust policy have given way

33. 2010 MERGER GUIDELINES, *supra* note 13, at 19.

34. *See id.*

35. Salop, *supra* note 6, at 276.

36. *See generally* Weiss, *supra* note 16, at 184-233.

37. Schmalensee, *supra* note 16, at 976.

38. *Id.* at 988.

39. For a leading example from twenty years ago and an analysis, see *FTC v. Staples, Inc.*, 970 F. Supp. 1066 (D.D.C. 1997); and Jonathan B. Baker, *Econometric Analysis in FTC v. Staples*, 18 J. PUB. POL'Y & MARKETING 11 (1999) (analyzing the motivation and methods behind the FTC's econometric analyses of pricing).

to equally incorrect inferences that have been used to justify a relaxed merger policy.”⁴⁰

Economic thinking has also greatly evolved over the past fifty years regarding the *interpretation* of the empirical evidence relating market concentration to various measures of market performance. Two key points from this literature bear emphasis.

First, since at least the 1970s, antitrust economists have recognized that in markets where there are substantial economies of scale, the process of competition often leads quite naturally to high levels of concentration.⁴¹ In such markets, the most efficient firms typically incur large fixed costs, including research and development (R&D) costs. In the long run, these firms will make the necessary investments only if they anticipate that future price-cost margins will be sufficiently large to allow them to earn an acceptable risk-adjusted rate of return. Thus, observing high levels of concentration and high price-cost margins does not, in and of itself, indicate any failure of the competitive process. Indeed, such a pattern is to be expected in industries where firms regularly make large R&D investments or incur other large fixed costs.

Second, quite apart from economies of scale, the process of competition can and often does cause a few firms to have large market shares if they are simply more efficient than their rivals.⁴² Thus, observing a few firms growing, and even driving smaller or less efficient firms out of business, also does not, in and of itself, indicate any failure of the competitive process.

For these reasons, high levels of concentration and high price-cost margins can result quite naturally in today’s economy from competitive processes playing out in ways that benefit consumers. This critical observation has very important policy implications. Efforts to proactively *deconcentrate* industries can easily be counterproductive – by disrupting economic efficiency and harming consumers – if they (1) force the breakup of the most successful and efficient firms; (2) prevent firms from achieving the available economies of scale; or (3) discourage firms from competing and growing for fear that they will later be broken up. These dangers were quite relevant in the 1960s, when proposals were floated to

40. Michael Salinger, *The Concentration-Margins Relationship Reconsidered*, 1990 BROOKINGS PAPERS ON ECON. ACTIVITY: MICROECONOMICS 287, 287.

41. See, e.g., ALFRED D. CHANDLER, JR., *STRATEGY AND STRUCTURE: CHAPTERS IN THE HISTORY OF THE AMERICAN INDUSTRIAL ENTERPRISE* (1962); ALFRED D. CHANDLER, JR., *THE VISIBLE HAND: THE MANAGERIAL REVOLUTION IN AMERICAN BUSINESS* (1977).

42. One robust empirical finding in industrial organization literature is that competing firms differ greatly in their efficiency. See, for example, Nicholas Bloom & John Van Reenen, *Why Do Management Practices Differ Across Firms and Countries*, 24 J. ECON. PERSP. 203 (2010), and the references therein.

actively deconcentrate American industry. Most significant in this regard was the 1968 “Neal Report,” which proposed passage of a “Concentrated Industries Act.”⁴³ This Act would have directed the Attorney General “to affirmatively search out all ‘oligopoly industries’ in the United States . . . and bring legal proceedings against all ‘oligopoly firms’ with the aim of reducing the share of each oligopoly firm to no more than 12%.”⁴⁴

More generally, modern industrial organization economics strongly supports the view that antitrust policy must always be careful not to discourage firms, even large firms, from competing on the merits to attract more customers. This idea is captured well by what has become the mantra of modern antitrust policy: the goal of antitrust is “the protection of *competition*, not *competitors*.”⁴⁵ The United States has not only led the way in recognizing this important principle but also spent decades exporting this core principle to competition authorities around the world.

What does all this mean for merger enforcement?

First and foremost, economic theory and a wide range of economic evidence support the conclusion that horizontal mergers that significantly increase market concentration are likely to lessen competition and harm consumers by raising prices, reducing output, or limiting product quality or innovation. We have in mind here not only the intraindustry studies on market concentration and price-cost margins noted above, but also (1) decades of experience with merger enforcement at the DOJ and the FTC and in the courts; (2) evidence regarding how business executives evaluate competition and make strategic decisions; and (3) analyses showing that reducing trade barriers and allowing foreign rivals to compete in a domestic market lead to greater productivity, better management practices, and lower prices.⁴⁶ Importantly, as shown especially by John Kwoka, the

43. PHIL C. NEAL ET AL., REPORT OF THE WHITE HOUSE TASK FORCE ON ANTITRUST POLICY, 115 CONG. REC. S15933, S16036 (daily ed. June 16, 1969). Phil Neal was the Chairman of the Task Force.

44. *Id.* at 2. See generally Herbert Hovenkamp, *Introduction to the Neal Report and the Crisis in Antitrust*, 5 COMPETITION POL'Y INT'L 217 (2009) (discussing the background of the Report and its understanding of oligopolies).

45. *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962); accord *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 906 (2007) (quoting *Atl. Richfield Co. v. USA Petroleum Co.*, 495 U.S. 328, 338 (1990)).

46. For a discussion of a tiny portion of this evidence, which is extensively developed in the literature on international trade, see Carl Shapiro, *Competition and Innovation: Did Arrow Hit the Bull's Eye?*, in *THE RATE AND DIRECTION OF INVENTIVE ACTIVITY REVISITED* 389-94 (Josh Lerner & Scott Stern eds., 2012).

evidence from merger retrospectives strongly supports the structural presumption by finding links between concentration and postmerger price increases.⁴⁷

Second, the modern view that the competitive process often leads to highly concentrated markets makes it *all the more important* to prevent the victors of that process from joining forces by merging. If two firms have each effectively achieved a large scale of operations or learned how to run their operations efficiently, consumers benefit greatly when they compete vigorously against each other. So, logically, the empirical regularities cited above – that large firms are often the most efficient and the efficiency achieved at the leading firms is difficult for other firms to imitate or for new entrants to achieve – caution strongly against allowing the merger of two incumbents with large market shares, that being the best single indicator of success. Growth by smaller firms and entry cannot in general be relied upon to replace the competition lost through such a merger. This conclusion applies not only to price competition but also to other forms of competition that may be more important in the long run, namely competition to develop and introduce new and improved products and services. Indeed, one of the most important roles for merger enforcement is to prevent established incumbents from acquiring mavericks, disruptive entrants, or other firms that threaten their positions. For that reason, it is important to be forward-looking when estimating the market shares of such firms.

Those who call for weakening or abandoning the structural presumption effectively argue that recent market success does not reliably predict future market success.⁴⁸ But this position is unsupported by the evidence. In the presence of economies of scale, which are likely to exist in a concentrated market, a small incumbent firm or an entrant is unlikely to be as effective a competitor as a larger firm. If firms differ greatly in their efficiencies, and if it is difficult for the less efficient firms to imitate their more efficient rivals (as is common), we will see a strong correlation between market share and efficiency. Again, if a firm with a

47. See generally John Kwoka, *The Structural Presumption and the Safe Harbor in Merger Review: False Positives or Unwarranted Concerns?*, 81 ANTITRUST L.J. 837, 837-872 (2017) (finding that empirical data from past mergers confirms the presumption that concentration over a certain threshold produces anticompetitive effects). For a comprehensive look at merger retrospectives, see generally JOHN KWOKA, *MERGERS, MERGER CONTROL, AND REMEDIES: A RETROSPECTIVE ANALYSIS OF U.S. POLICY* (2015). Michael Vita and F. David Osinski critique part of Kwoka's book in Michael Vita & F. David Osinski, *John Kwoka's Mergers, Merger Control and Remedies: A Critical Review* (Dec. 21, 2016) (unpublished manuscript) (on file with authors). Kwoka responds to this critique in John Kwoka, *Mergers, Merger Control and Remedies: A Response to the FTC Critique* (Mar. 2017) (unpublished manuscript) (on file with authors).

48. E.g., John Harkrider, *Proving Anticompetitive Impact: Moving Past Merger Guidelines Presumptions*, 2005 COLUM. BUS. L. REV. 317.

large market share is acquired, it is unlikely that smaller, less efficient firms or entrants will be able to replace the lost competition in a timely manner. Likewise, if the merging firms own valuable specific assets that are difficult to replicate – such as brand names, established relationships with customers, or important intellectual property – entry is unlikely to protect consumers from the loss of competition resulting from the merger.

In short, the structural presumption fits well not only with the economic evidence but also with business reality: as a general rule, firms with large market shares make for more effective competitors than firms with small market shares. When two of them merge, it takes time for the competition lost in the merger to be effectively replaced by smaller firms or entrants.⁴⁹

II. STRUCTURE AND PRESUMPTIONS IN THE CASE LAW AND GUIDELINES

Not only is the structural presumption theoretically and empirically justified, but it is also very well-established in the case law. Challenges facing the courts tend to fall into two categories: (a) what evidence is sufficient to establish the presumption; and (b) once established, what must defendants show to rebut the presumption?

The decision most identified with merger laws driven by structural presumptions is *Philadelphia National Bank*, in which the Supreme Court appeared to make market structure almost decisive.⁵⁰ The Court observed that, because private business needed to be able to engage in planning, merger rules must be predictable and less prone to error. As a result, courts should “simplify the test of illegality” in the “interest of sound and practical judicial administration.”⁵¹ With that, the Court held that a merger producing a firm that controls an “undue percentage share” of the market and that “results in a significant increase in the

49. While in theory sufficient merger-specific synergies could make up for the loss of competition resulting from the merger (so consumers gain rather than lose), we are aware of no economic evidence indicating that such efficiencies are common. Certainly there is no such evidence sufficient to undermine the structural presumption as a general matter. In any event, the structural presumption is rebuttable. One means by which the merging parties might be able to rebut the presumption is through an efficiencies defense. While the Supreme Court has never recognized such a defense, lower courts have been open to evidence about efficiencies. See 4 AREEDA & HOVENKAMP, *supra* note 4, ch. 9E (analyzing cases).

50. *United States v. Phila. Nat'l Bank*, 374 U.S. 321 (1963); see also Symposium, *Philadelphia National Bank at 50*, 80 ANTITRUST L.J. 189 (2015) (interviewing Judge Posner for his contributions to Justice Brennan's opinion in *Philadelphia National Bank* and its emphasis on the structural presumption).

51. *Phila. Nat'l Bank*, 374 U.S. at 363.

concentration of firms in that market” is “inherently likely to lessen competition substantially.”⁵² As a result, it must be enjoined, at least “in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects.”⁵³

The Court then found such “undue” concentration based on the merging firms’ premerger market shares of 17% and 13% and a CR₄ of around 70%.⁵⁴ These numbers exceeded the standards for illegality in merger cases of that era,⁵⁵ although they would not necessarily generate a challenge today. Beyond condemning the merger in this case, the Supreme Court did not specify the size of an “undue” percentage or the amount of a “significant” increase and said nothing about overall market concentration levels.⁵⁶ That last point is perplexing because it suggests the Court was apparently not worried about overall market concentration as such, but mainly about the market shares of the merging partners. The Court also made clear that the market-share-based conclusion was presumptive. It applied only “in the absence of evidence” showing that the merger would not have the feared anticompetitive effects.⁵⁷ The Court also did not decide how burdens of proof should be assigned.

The Supreme Court’s first major qualification of *Philadelphia National Bank* came in 1974 in its *General Dynamics* decision.⁵⁸ Brushing aside the government’s challenge, the Supreme Court concluded that the government’s reliance on the

52. *Id.*

53. *Id.*

54. *Id.* at 363-72. The CR₄ consists of the sum of the market shares of the market’s four largest firms. The 1968 Merger Guidelines employed the CR₄, but the index was replaced in the 1982 Merger Guidelines by the HHI, which is measured by the squares of the market shares of all firms in the market. See 1982 MERGER GUIDELINES, *supra* note 31, at 12-13. Salop estimates that the merger between PNB and Girard would have increased the HHI from 1459 to 2037 in the market for loans, and from 1442 to 2059 in the market for deposits. Salop, *supra* note 6, at 273 tbl.1.

55. See, e.g., *United States v. Von’s Grocery Co.*, 384 U.S. 270, 281 (1966) (White, J., concurring) (noting that the acquisition, which the majority held invalid under Section 7 of the Clayton Antitrust Act, had a premerger CR₄ of 24.4% and merging partner shares of 4.7% and 4.2%). Other cases leading to condemnation on low market shares and/or concentration include *United States v. Phillipsburg Nat’l Bank & Tr. Co.*, 399 U.S. 350, 365-69 (1970); *United States v. Third Nat’l Bank in Nashville*, 390 U.S. 171, 181-83 (1968); *United States v. Pabst Brewing Co.*, 384 U.S. 546, 550-53 (1966); *United States v. Cont’l Can Co.*, 378 U.S. 441, 458-66 (1964); and *United States v. Aluminum Co. of Am.*, 377 U.S. 271, 277-81 (1964).

56. *Phila. Nat’l Bank*, 374 U.S. at 364.

57. *Id.* at 363.

58. See *United States v. Gen. Dynamics Corp.*, 415 U.S. 486, 497-98 (1974).

merging firms' historical market shares in the production and sale of coal in certain geographic areas exaggerated the merger's anticompetitive effects.⁵⁹ The district court had found the alleged market to be too narrowly defined, given that coal was steadily losing market share to oil and natural gas.⁶⁰ Further, the companies' depleted reserves strongly suggested that historical market shares would not be a reliable predictor of the merged firm's future competitive presence.⁶¹ The Supreme Court affirmed, focusing largely on the second ground.⁶²

The Supreme Court's *General Dynamics* analysis did not attack the structural presumption as such. It is better read as cautioning how market shares should be measured and understood in order to determine whether the structural presumption applies.⁶³ The D.C. Circuit's 1990 opinion in *Baker Hughes* thus overread *General Dynamics* on this point.⁶⁴ However, the *Baker Hughes* decision also emphasized the esoteric nature of the market in that case—the U.S. market for hard-rock hydraulic underground drilling rigs—which was characterized by a very small number of transactions and, as a result, wide annual variations in market share data based on sales.⁶⁵ While a low number of annual sales can make market share data noisy, and thus suggest that measuring market shares over a longer period of time would result in greater accuracy, we do not see why it reduces the danger of collusion. One could just as easily conclude to the contrary.⁶⁶ The *Baker Hughes* opinion also produced a startling conclusion about the burden-shifting framework—namely, that “[i]mposing a heavy burden of production” on defendants’ rebuttal to structural evidence would be “anomalous where, as here, it is easy to establish a prima facie case.”⁶⁷ The court appeared to be saying that where high market shares make the government’s prima facie structural case strong, and thus easy to make,⁶⁸ some sense of justice requires that the defendant’s case be correspondingly easy to make as well. This makes little sense

59. *Id.* at 501.

60. *United States v. Gen. Dynamics Corp.*, 341 F. Supp. 534, 538-40 (N.D. Ill. 1972).

61. *Id.* at 559-60.

62. *Gen. Dynamics*, 415 U.S. at 501-02.

63. See 4 AREEDA & HOVENKAMP, *supra* note 4, ¶ 962a.

64. *United States v. Baker Hughes, Inc.*, 908 F.2d 981, 982-83 (D.C. Cir. 1990).

65. *Id.* at 986.

66. See George Bittlingmayer, *Decreasing Average Cost and Competition: A New Look at the Addyston Pipe Case*, 25 J.L. & ECON. 201, 206-10 (1982) (explaining the relationship between lumpiness of sales and propensity for collusion).

67. *Baker Hughes*, 908 F.2d at 992.

68. See *id.* at 983 & n.3. The premerger market shares were 40.8% and 17.5%, and in one year the two firms enjoyed a combined share of 76%. *Id.* at 983 n.3.

to us. When the plaintiff's case is stronger, the defendant's case is accordingly weaker and will naturally be harder to prove. At that point the court launched an attack against the "role of statistics" in Section 7 actions, referring expressly to the HHI.⁶⁹

Notwithstanding *Baker Hughes's* analytical shortcomings, the decision has attained considerable importance in merger litigation, giving rise to what is commonly called the "*Baker Hughes* presumption." As formulated in the D.C. Circuit's *Heinz* decision:

First the government must show that the merger would produce a firm controlling an undue percentage share of the relevant market, and [would] result[] in a significant increase in the concentration of firms in that market. Such a showing establishes a presumption that the merger will substantially lessen competition. To rebut the presumption, the defendants must produce evidence that show[s] that the market-share statistics [give] an inaccurate account of the [merger's] probable effects on competition in the relevant market. If the defendant successfully rebuts the presumption [of illegality], the burden of producing additional evidence of anticompetitive effect shifts to the government, and merges with the ultimate burden of persuasion, which remains with the government at all times.⁷⁰

In fact, the widely-followed *Heinz* statement⁷¹ of the burden-shifting framework is not very distinct from the *Philadelphia National Bank* Court's findings. There the Court wrote:

[W]e think that a merger which produces a firm controlling an undue percentage share of the relevant market, and results in a significant increase in the concentration of firms in that market, is so inherently likely

69. *Id.* at 992.

70. *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 715 (D.C. Cir. 2001) (citations and quotation marks omitted).

71. See *Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys.*, 778 F.3d 775, 783 (9th Cir. 2015) (applying a similar framework to that of the *Philadelphia National Bank* Court); *FTC v. Univ. Health, Inc.*, 938 F.2d 1206, 1218-19 (11th Cir. 1991); *United States v. Bazaarvoice, Inc.*, No. 13-CV-00133-WHO, 2014 WL 203966, at *64 (N.D. Cal. Jan. 8, 2014) (similar); *United States v. H&R Block, Inc.*, 833 F. Supp. 2d 36, 49-50 (D.D.C. 2011).

to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects.⁷²

The *Philadelphia National Bank* Court was clearly concerned about the “rising tide of economic concentration in the American economy.”⁷³ At the same time, however, it wished to simplify the test of illegality so that “businessmen can assess the legal consequences of a merger with some confidence.”⁷⁴ As a result, “elaborate proof of market structure, market behavior, or probable anticompetitive effects” was unnecessary. This latter goal was addressed by the Merger Guidelines. The structural presumption was not originally based on any particular mechanism by which a merger would lessen competition, but rather on the general notion that competition is strongest when there are many firms, none with a large market share. The 1968 Merger Guidelines adopted this highly structural approach to merger review and enforcement, stating that “the primary role of Section 7 enforcement is to preserve and promote market structures conducive to competition.”⁷⁵

The 1982 Guidelines took merger enforcement in a somewhat different direction, giving much less weight to market concentration and much more weight to the predicted competitive effects of a merger. The 1982 Merger Guidelines state, “The unifying theme of the Guidelines is that mergers should not be permitted to create or enhance ‘market power’ or to facilitate its exercise.”⁷⁶ Under the 1982 Merger Guidelines, the predicted competitive effects of a proposed merger were generally evaluated based on whether that merger would make cartel-like coordination more likely or more effective. That approach fit well with the structural presumption, applying George Stigler’s theory that the HHI metric of market concentration also measures the risk of collusion.⁷⁷

Beginning with the 1992 Horizontal Merger Guidelines, some version of the burden-shifting framework has also been included in agency enforcement policy. The 1992 Guidelines make market share thresholds presumptive, together

72. *United States v. Phila. Nat’l Bank*, 374 U.S. 321, 363 (1963).

73. *Id.* (quoting *Brown Shoe Co. v. United States*, 370 U.S. 294, 315 (1962)).

74. *Id.* at 362.

75. 1968 MERGER GUIDELINES, *supra* note 21, § 2.

76. 1982 MERGER GUIDELINES, *supra* note 31, § I.

77. George J. Stigler, *A Theory of Oligopoly*, 72 J. POL. ECON. 44, 55 (1964). William Baxter, the Assistant Attorney General who issued the 1982 Merger Guidelines, was strongly influenced by Stigler’s work. On Stigler’s influence on Baxter, see Dennis W. Carlton & Sam Peltzman, *Introduction to Stigler’s Theory of Oligopoly*, 6 COMPETITION POL’Y INT’L 237, 248 (2010).

with language indicating that “[t]he presumption may be overcome by a showing that factors set forth [elsewhere in the Guidelines] make it unlikely that the merger will create or enhance market power or facilitate its exercise, in light of market concentration and market shares.”⁷⁸

Those guidelines also state, however, that they do not “attempt to assign the burden of proof, or the burden of coming forward with evidence, on any particular issue.”⁷⁹ The 2010 Guidelines actually come the closest to incorporating the presumption as it was originally articulated in *Philadelphia National Bank*:

The Agencies give weight to the merging parties’ market shares in a relevant market, the level of concentration, and the change in concentration caused by the merger. Mergers that cause a significant increase in concentration and result in highly concentrated markets are presumed to be likely to enhance market power, but this presumption can be rebutted by persuasive evidence showing that the merger is unlikely to enhance market power.⁸⁰

The courts have been quite receptive to the changing structural standards in the Guidelines as they have evolved from the first set, issued in 1968, to the current 2010 Guidelines. Both the structural thresholds and the weight to be given to them have varied, and the courts have gone along—implicitly agreeing that as evidence and theory in this area change, the agencies have the discretion to respond accordingly.⁸¹

III. THE STRUCTURAL PRESUMPTION IN UNILATERAL EFFECTS CASES

A more consequential shift that occurred with the release of the 1992 Horizontal Merger Guidelines was the explicit introduction of “unilateral effects” into

78. U.S. DEP’T OF JUSTICE, HORIZONTAL MERGER GUIDELINES § 1.51(c) (1992 & 1997), <http://www.justice.gov/atr/horizontal-merger-guidelines-o> [<http://perma.cc/JFS5-79EJ>].

79. *Id.* § 0.1.

80. 2010 MERGER GUIDELINES, *supra* note 13, at § 2.1.3 (citation omitted).

81. For discussions of the gradual evolution of the Guidelines, see Donald I. Baker & William Blumenthal, *The 1982 Guidelines and Preexisting Law*, 71 CALIF. L. REV. 311 (1983) (discussing the 1982 Guidelines); Dennis W. Carlton, *Revising the Horizontal Merger Guidelines*, 6 J. COMPETITION L. & ECON. 619 (2010) (discussing the 2010 Guidelines); and Thomas B. Leary, *The Essential Stability of Merger Policy in the United States*, 70 ANTITRUST L.J. 105 (2002) (discussing the 1992 Guidelines, as revised in 1997).

merger analysis.⁸² Unilateral effects arise when a merger eliminates competition between two merging firms but does not alter the manner in which the other firms in the market compete. As a result, the theory of unilateral effects does not depend on any assumption of market-wide coordination among rivals. Now, twenty-five years later, the clear majority of merger investigations focuses on unilateral effects; only a minority focuses on coordinated effects.⁸³ Overall, this has been a positive development, reflecting a shift in the U.S. economy away from commodities and manufacturing and toward differentiated products and services. But this shift has posed a challenge for the structural presumption because unilateral effects largely depend on the extent of direct competition, or “diversion,” between the merging firms, rather than on the overall level of market concentration. Indeed, the 2010 Horizontal Merger Guidelines state that “[t]he Agencies rely much more on the value of diverted sales than on the level of the HHI for diagnosing unilateral price effects in markets with differentiated products.”⁸⁴

Despite the shift in merger enforcement toward unilateral effects, the *Philadelphia National Bank* presumption based on structural evidence and the opportunity to rebut remains alive and well in horizontal merger analysis. As articulated in the 2010 Horizontal Merger Guidelines, the basic contours of the presumption have been adapted to unilateral effects analysis, where the primary inquiry is not based on overall market concentration but rather on the relative degree of substitution between the merging firms’ output and the predicted impact of the merger on the postmerger firm’s own prices.⁸⁵

82. See FED. TRADE COMMISSION, HORIZONTAL MERGER GUIDELINES § 2.2 (Apr. 8, 1997), <http://www.ftc.gov/sites/default/files/attachments/merger-review/hmg.pdf> [<http://perma.cc/BC3M-WVGX>].

83. See Malcolm B. Coate & Shawn W. Ulrick, How Much Does the Choice Between Collusion and Unilateral Effects Matter in Merger Analysis? 1 (Nov. 15, 2017) (unpublished manuscript), http://ssrn.com/abstract_id=2995679 [<http://perma.cc/HQ89-7Q7V>] (noting that “[t]he share of (non-monopoly) merger investigations studied under a unilateral effects theory grew, with some ups and downs, from 16 percent in fiscal years 1989-1992, to more than half in 1999-2000, to 76 percent in 2011-2014”).

84. 2010 MERGER GUIDELINES, *supra* note 13, at § 6.1. See Shapiro, *supra* note 12, for an extended analysis of unilateral price effects in markets with differentiated products.

85. See, e.g., *United States v. Anthem, Inc.*, 236 F. Supp. 3d 171 (D.D.C.), *aff’d*, 855 F.3d 345 (D.C. Cir.), *cert. dismissed*, 137 S. Ct. 2250 (2017) (applying the *Baker Hughes* burden-shifting analysis in a unilateral effects case); *FTC v. Sysco Corp.*, 113 F. Supp. 3d 1, 15, 23 (D.D.C. 2015) (permitting a rebuttal to a prima facie unilateral effects case, but agreeing with the FTC that an injunction should be issued against a proposed merger); *United States v. H&R Block, Inc.* 833 F. Supp. 2d 36, 49-50 (D.D.C. 2011) (applying the *Baker Hughes* burden-shifting analysis in a unilateral effects case); *FTC v. CCC Holdings Inc.*, 605 F. Supp. 2d 26, 47-49 (D.D.C. 2009) (discussing evidence of historic entry by new firms).

The extent to which the structural presumption operates in unilateral effects cases invites an additional concern: to what extent can a “structural” presumption be said to apply when a particular type of merger analysis does not require a market definition at all? Economic analysis of unilateral effects can proceed without defining a relevant market, although there is some question about whether such analysis is permitted by the statute.⁸⁶ The language of Section 7 requires those challenging a merger to identify some “line of commerce” and “section of the country” in which the anticompetitive effects of a merger will be felt. In *Brown Shoe*, the Supreme Court interpreted the term “line of commerce” to refer to a relevant product market, and the term “section of the country” to refer to a relevant geographic market.⁸⁷

The legislative history of Section 7 is not entirely clear on the issue, but more likely than not the two phrases were never intended to have so precise a meaning. The phrase “line of commerce” was in widespread use by both businesspeople and courts to describe a particular “line” that a seller might sell, often including nonsubstitutable goods.⁸⁸ The phrase “section of the country” was very likely intended to be jurisdictional – that is, to ensure that the statute reached only anticompetitive effects felt within the United States.⁸⁹ By 1950, when the amendments to Section 7 were drafted, courts had already begun to use the term “relevant market,”⁹⁰ and if that is what Congress meant, they very likely would have used it. The effect of this reading is not particularly important in a traditional concentration-increasing merger where the threat is of collusion or collusion-like behavior. For example, use of the HHI requires that a relevant market, i.e.,

86. See, e.g., Deborah L. Feinstein et al., *Merger Guidelines Revisited?*, 24 ANTITRUST 8 (2009) (providing commentary contemporaneously with the 2010 Guidelines and expressing doubt that one could do merger analysis without defining a relevant market).

87. *Brown Shoe Co. v. United States*, 370 U.S. 294, 324 (1962) (“The ‘area of effective competition’ must be determined by reference to a product market (the ‘line of commerce’) and a geographic market (the ‘section of the country’).”); accord *United States v. Gen. Dynamics Corp.*, 415 U.S. 486, 491 (1974); *FTC v. Whole Foods Mkt., Inc.*, 548 F.3d 1028, 1036 (D.C. Cir. 2008).

88. E.g., *Gilbert v. Citizens’ Nat’l Bank of Chickasha*, 160 P. 635, 641 (Okla. 1916) (holding that contract interpretation depends upon the customs or usage of trade of “those engaged in that line of commerce.” (quoting *Mobile Fruit & Trading Co. v. Judy & Son*, 91 Ill. App. 82, 90 (1900))).

89. See Herbert J. Hovenkamp, *Markets in Merger Analysis*, 57 ANTITRUST BULL. 887, 892 (2012) (discussing other decisions).

90. See, e.g., *United States v. Columbia Steel Co.*, 334 U.S. 495, 508 (1948) (disagreeing with the government on the selection of the relevant market); *United States v. Aluminum Co. of Am.*, 148 F.2d 416 (2d Cir. 1945) (using the term “market”).

line of commerce, be identified before concentration can be assessed. The requirement can become an unnecessary and counterproductive encumbrance, however, in unilateral effects cases, which examine diversion of sales as between specific pairs of firms. In unilateral effects cases involving differentiated products, drawing an artificial boundary between products that are close enough substitutes to be “in the market” and those that are not is simply not a part of the economic analysis of likely competitive effects.⁹¹ Put differently, in most cases, unilateral effects can be estimated without the need to define a relevant antitrust market, and the legal requirement that it be done does not assist in this analysis.

In any event, *Brown Shoe* not only equated the two statutory phrases with relevant markets, but also found that Congress did not explicitly accept or reject particular tests for measuring relevant markets, “either as defined in terms of product or in terms of geographic locus of competition, within which the anti-competitive effects of a merger were to be judged.”⁹²

A completely acceptable reading of this language is that any grouping of sales identified as experiencing a non-cost-justified price increase can be considered a “relevant market” for the purpose of merger analysis. Happily for economists, this approach lines up very well with relevant markets defined using the HMT: if the merged firm would find it profitable to significantly raise prices unilaterally after the merger, then the HMT as applied to the merging firms’ products will be satisfied.⁹³ It does not matter if conventional market definition criteria under *Brown Shoe* would also have identified a broader grouping of products as a relevant market. For example, if a merger of firms A and B with harmful unilateral effects would lead to a significant price increase, then postmerger the products sold by firm AB become the grouping of products over which the effects of that merger are to be judged. It does not matter that firms A and B may also sell in a larger product market that also includes products sold by other firms.⁹⁴

Brown Shoe rather awkwardly gave some credence to this approach by acknowledging that even when a market is defined, relevant “submarkets may exist which, in themselves, constitute product markets for antitrust purposes.”⁹⁵ The

91. Various methods are available to evaluate competitive effects, including looking at diversion ratios, calculating upward pricing pressure, and performing merger simulation, but none of these rely on market definition.

92. *Brown Shoe*, 370 U.S. at 320-21.

93. The converse is not true, since the HMT takes as given the prices of all products outside the candidate market and assumes no entry into the relevant market, which makes it more likely that the price increase in question will be profit-maximizing for the merged firm.

94. For earlier discussion about the HMT and our point that a merger violates section 7 if it is likely to harm competition in any relevant market, see *supra* text accompanying notes 8-9.

95. *Brown Shoe*, 370 U.S. at 325.

term “submarket” has been widely criticized as permitting narrow markets to be defined that are in fact not relevant groupings for determining a firm’s ability to increase prices.⁹⁶ But the point here is that under unilateral effects analysis, the term is being applied to a grouping of sales over which the postmerger firm *does* have the power to increase prices. Indeed, that is how most courts interpret the term today: a relevant submarket, just like a relevant market, is a grouping of sales capable of profitably sustaining a non-cost-justified price increase.⁹⁷

We suggest that courts either drop the awkward and unnecessary “submarket” label, because properly defined “submarkets” are themselves relevant markets, or simplify matters by explicitly stating that a merger harming competition in a properly defined “submarket” is illegal.⁹⁸ In speaking to this issue, the district court in *Oracle* observed that *Brown Shoe* really suggested that “the technical definition of a relevant market in an antitrust case may be smaller than a layperson would normally consider to be a market.”⁹⁹ In any event, while some courts have employed the term “submarkets” in their analysis of unilateral effects cases,¹⁰⁰ most of them, including *Oracle*, have generally rejected the idea that a “submarket” is a different concept from a market. We reiterate, however, that in a unilateral effects merger case calling the two-firm grouping over which a price increase is threatened, a “market” need not do any harm to the concept of market definition. It also does not preclude a finding that some larger grouping of sales including these two firms is also a relevant market. At the same time, however, at least some decisions appear to require a market definition in a unilateral effects case.¹⁰¹

IV. MARKET STRUCTURE, COMPETITION, AND CONSUMER WELFARE

Our analysis so far has assumed that the goal of merger enforcement policy is to promote competition, even if the result of competition is that larger or more efficient firms win the competitive battle against smaller or less efficient ones. In

96. See, e.g., 2B AREEDA & HOVENKAMP, *supra* note 4, ¶ 533.

97. See 4 *id.* ¶ 522.

98. See *id.* ¶ 913.

99. United States v. Oracle Corp., 331 F. Supp. 2d 1098, 1119 (N.D. Cal. 2004).

100. See, e.g., FTC v. Staples, Inc., 970 F. Supp. 1066, 1075 (D.D.C. 1997).

101. See, e.g., FTC v. Whole Foods Mkt., Inc., 548 F.3d 1028, 1036 (D.C. Cir. 2008). However, and somewhat mysteriously, the court suggested that a market definition would not necessarily be “crucial to the FTC’s likelihood of success on the merits” in a case seeking a preliminary injunction. *Id.*

practice, merger policy has sought to promote competition by applying the consumer welfare standard, under which a merger is judged to be anticompetitive if it disrupts the competitive process and harms trading parties on the other side of the market.

As we will now explain, for over one hundred years, the goal of merger policy has generally been to promote competition. Preventing markets from becoming highly concentrated through mergers has been seen as a *means* to promoting competition, not as a separate goal in and of itself.

Section 7 of the Clayton Act was originally passed in 1914 and has been subject to only one major amendment in substance, the Celler-Kefauver Act of 1950.¹⁰² Most of the dramatic changes in merger policy that came soon after resulted more from the legislative history of that provision rather than from actual changes to the statute's text.¹⁰³ The text itself merely expanded Section 7 to cover vertical as well as horizontal mergers, and to reach asset acquisitions as well as stock acquisitions.

In the subsequent economic and enforcement literature, market structure has never been a freestanding target of merger policy. Rather, market structure has been a means of tackling merger law's more fundamental concerns, which are higher prices or reduced output or other consumer harms that result from less competitive market structures. Bain, the principal architect of the so-called "Structure-Conduct-Performance" paradigm, was clear about this as early as the 1950s,¹⁰⁴ as were his followers.¹⁰⁵

Supreme Court merger policy has been somewhat less consistent, with some wavering during the 1960s. Most notably, although the 1962 *Brown Shoe* merger decision (the first to interpret the 1950 amendments) emphasized the evils of high concentration, it actually condemned the merger based on the district court's factual findings that the postmerger firm would be in a position to undersell its rivals – offering either lower-priced shoes or shoes of higher quality

102. Celler-Kefauver Antimerger Act of 1950, Pub. L. No. 81-899, 64 Stat. 1225 (codified as amended at 15 U.S.C. § 18 (2012)). In addition, the statute was amended in 1980 to reach mergers by firms other than corporations and also acquisitions "in . . . or affecting" commerce. Antitrust Procedural Improvements Act of 1980, Pub. L. No. 96-349, § 6(a), 94 Stat. 1154, 1157-58 (codified as amended at 15 U.S.C. § 18 (2012)).

103. Bok, *supra* note 17, at 233-38 (discussing this history).

104. See, e.g., JOE S. BAIN, *INDUSTRIAL ORGANIZATION* 408-10 (1959) (discussing the relationship between market structure and efficiency); *id.* at 411-16 (discussing the relationship of market structure to price-cost margins, concluding that "high seller concentration tends to be connected with substantially higher rates of excess profit").

105. See, e.g., Leonard W. Weiss, *The Structure-Conduct-Performance Paradigm and Antitrust*, 127 U. PA. L. REV. 1104, 1104 (1979).

for the same price.¹⁰⁶ That is, the perceived evil of high concentration in that case was scale or scope economies¹⁰⁷ that served to give a large firm a competitive advantage over its rivals and to deliver lower prices to consumers. As then-antitrust professor Bok lamented, that concern was actually quite consistent with the legislative history.¹⁰⁸

Except for that interlude, however,¹⁰⁹ the DOJ and eventually the FTC have generally agreed that merger policy should be concerned with high prices and other consumer harms; measuring concentration is simply a *mechanism* for assessing the risk of such harms.¹¹⁰ Even the 1968 Merger Guidelines recognized this fact, concluding that “a concentrated market structure, where a few firms account for a large share of the sales, tends to discourage vigorous price competition . . . and to encourage other kinds of conduct, such as . . . inefficient methods of production or excessive promotional expenditures, of an economically undesirable nature.”¹¹¹ As noted above, the 1982 Merger Guidelines were quite explicit about the purpose behind the DOJ’s merger enforcement: “The unifying theme of the Guidelines is that mergers should not be permitted to create or enhance ‘market power’ or to facilitate its exercise.”¹¹² The fundamental concern with high prices and consumer harms rather than concentration as such is particularly clear when we consider unilateral effects tests under the more recent Guidelines, including those issued in 2010. Under unilateral effects analysis, market concentration and even market definition itself are at most secondary concerns. Rather, one seeks to measure anticipated price effects more directly.¹¹³

106. *United States v. Brown Shoe Co.*, 179 F. Supp. 721, 738 (E.D. Mo. 1959), *aff’d*, 370 U.S. 294 (1962) (condemning the merger because it gave the postmerger firm decisive advantages, resulting in “lower prices or in higher quality for the same price,” with the effect that “the independent retailer can no longer compete”).

107. Most particularly, the case involved economies of distribution, resulting in condemnation of the vertical aspect of the merger from Brown’s production facilities to Kinney’s retail stores. *Id.*

108. Bok, *supra* note 17, at 236.

109. *Brown Shoe* and other big 1960s-era merger cases were brought by either the Antitrust Division or the FTC, not by private plaintiffs.

110. Prior to 1950, the FTC’s concerns were much more with high concentration as such. *See, e.g.*, TEMP. NAT’L ECON. COMM., FINAL REPORT AND RECOMMENDATIONS, S. DOC. NO. 77-35 (1st Sess. 1941) (observing trends toward greater concentration and recommending correctives); FED. TRADE COMM’N, REPORT ON THE MERGER MOVEMENT: A SUMMARY REPORT (1948) (discussing high concentration).

111. 1968 MERGER GUIDELINES, *supra* note 21, § 2.

112. 1982 MERGER GUIDELINES, *supra* note 31, at 2.

113. Overall, the 2010 Guidelines describe the relevant evidence as speaking to whether “the merging parties intend to raise prices, reduce output or capacity, reduce product quality or variety,

One reason for the disconnect between current policy and the *Brown Shoe* concerns with the price-reducing potential of larger firms is the language of Section 7 itself. It speaks of mergers that may “lessen competition” without defining what “competition” means.¹¹⁴ Does “lessened competition” refer to lower output and higher price-cost margins, or rather to a market structure with fewer firms? If the former, then a merger creating a larger, more efficient firm that charges lower prices is welcome. If the latter, such a merger is unwelcome, especially if that firm will drive smaller, less-efficient firms out of business. Both of these are more or less consistent with the lay understanding of “competition.” Applying a consumer welfare standard favors the former, which is clearly the intention of the 2010 Merger Guidelines. Those Guidelines define competitive harm in terms of mergers that “encourage one or more firms to raise price, reduce output, diminish innovation, or otherwise harm customers as a result of diminished competitive constraints or incentives.”¹¹⁵

We wholeheartedly support the ongoing application of the consumer welfare standard, as we have used the term here, as the means by which antitrust promotes competition in practice. We are unaware of any practical alternative that would be superior. For example, we very much doubt that the DOJ and FTC could evaluate proposed mergers based on their impact on *political* power in a manner that would be predictable and consistent with the rule of law, without dangerously politicizing merger enforcement. We also fear that evaluating mergers based on protecting small businesses or their employment effects would hinder rather than promote long-run economic growth.

We always welcome policy proposals designed to improve the effectiveness of merger enforcement. However, any call to abandon the consumer welfare standard, around which a broad bipartisan consensus has formed over the past fifty years based on extensive practical experience, should at a minimum offer a specific alternative, explain how that alternative would work in practice, and demonstrate using real-world cases and evidence why the proposed alternative would be superior to current practice. We have seen no proposal coming close to meeting these requirements.

withdraw products or delay their introduction, or curtail research and development efforts after the merger, or explicit or implicit evidence that the ability to engage in such conduct motivated the merger . . .” 2010 MERGER GUIDELINES, *supra* note 13, § 4.

114. Clayton Act § 7, 15 U.S.C. § 18 (2012).

115. 2010 MERGER GUIDELINES, *supra* note 13, § 2.

V. CURRENT LEGISLATIVE EFFORTS TO STRENGTHEN MERGER ENFORCEMENT

Assuming the courts embrace the overall framework that the Supreme Court established in *Philadelphia National Bank*, we believe that merger enforcement can be significantly strengthened through a combination of suitable enforcement actions taken by the DOJ, the FTC, and state attorneys general. This framework should be updated to reflect the experience gained from merger enforcement and advances in industrial organization economics since that decision. In this manner, merger enforcement can be made significantly stronger without the need for new legislation. Legislative changes could, of course, go further and operate far more rapidly than can government enforcement actions and the resulting development of the case law. But legislative changes can also create new problems and have unintended effects, so caution is needed.

In September 2017, Senator Amy Klobuchar of Minnesota, the Ranking Member on the Senate Judiciary Subcommittee on Antitrust, Competition Policy and Consumer Rights, along with several Democratic cosponsors, introduced the Consolidation Prevention and Competition Promotion Act of 2017.¹¹⁶ This bill is designed to make merger enforcement more aggressive, but appears unlikely to pass in the current Republican-controlled Congress. Nevertheless, alongside the antitrust plank in the Democratic Party platform attending the 2016 election,¹¹⁷ it reflects concerns that merger enforcement has not been aggressive enough in recent years.

First, the bill would substitute the Clayton Act's language barring mergers that "substantially" lessen competition with the word "materially," which the bill defines as "more than a *de minimis* amount."¹¹⁸ We welcome this change, which is clearly intended to strengthen the government's hand in court, although we are uncertain just how it will actually affect litigated merger cases.

Second, the bill would substitute the phrase "monopoly or a monopsony" for the term "monopoly."¹¹⁹ We are unclear why the drafters included this language, because Section 7 currently reaches mergers among buyers, as recognized

¹¹⁶. S. 1812, 115th Cong. (2017).

¹¹⁷. See *2016 Democratic Party Platform*, DEMOCRATIC PLATFORM COMMITTEE 11 (July 2016), http://s3.amazonaws.com/uploads.democrats.org/Downloads/2016_DNC_Platform.pdf [<http://perma.cc/CT72-9QVU>].

¹¹⁸. S. 1812 § 2(b)(2).

¹¹⁹. *Id.* § 3(2).

by both the case law¹²⁰ and the 2010 Merger Guidelines.¹²¹ But the language may help clarify and emphasize for the courts that harm to suppliers, such as farmers or workers, that results from a merger between their customers can violate Section 7.

In general, a merger that harms counterparties to the merging firms by restricting the competitive choices available to them can violate Section 7. In the “normal” case where two competing *sellers* are merging, the potentially harmed counterparties are their customers. The canonical harm comes in the form of higher prices charged by the merging firms, which restricts demand. These customers may themselves be businesses, or they may be final consumers. When two competing sellers merge, antitrust attorneys and economists usually refer to the impact on “consumers,” but it is more accurate to refer to the impact on “customers.”¹²² An important question in any such merger is whether the merging firms are two of only a few suppliers to which certain customers can turn. When two competing *buyers* are merging, the economic analysis is formally equivalent, but with a different set of labels. The potentially harmed counterparties are the suppliers to the merging parties, and the canonical harm comes in the form of lower prices paid by the merging firms for the input in question, which restricts supply.¹²³ An important question in any such merger is whether the merging firms are two of only a few customers to which certain suppliers can sell. One reason there are relatively few buy-side merger challenges is that it is relatively rare for the merging firms to be two of only a few customers to which their suppliers can turn.¹²⁴

Third, under this bill, in a case brought by the DOJ, the FTC, or a state attorney general (but not private plaintiffs), a merger would be illegal if it “would

120. *E.g.*, *United States v. Pennzoil Co.*, 252 F. Supp. 962 (W.D. Pa. 1965) (granting a preliminary injunction).

121. 2010 MERGER GUIDELINES, *supra* note 13, at 32-33.

122. When the direct customers of the merging parties are harmed, it may be presumed that some harm will flow downstream to final consumers as well, as the higher prices are passed through to some degree.

123. In the case of “classic monopsony,” the sole buyer reduces the quantity purchased, which drives down the equilibrium price. This situation applies when a single buyer purchases from many suppliers of a homogeneous good who are price-takers. In the more common situation in which the inputs are differentiated, or in which the buyer negotiates with its suppliers, the mechanism is different, and the lower price will tend over time to reduce the quantity, quality, or variety of the products supplied, as suppliers make various investment decisions.

124. See, for example, *United States v. Anthem, Inc.*, 855 F.3d 345, 356, 371 (D.C. Cir. 2017), where the panel majority and a dissenter considered whether lower prices paid to providers were an efficiency “defense” to the merger or rather constituted an anticompetitive exercise of monopsony power. See Hovenkamp, *supra* note 7.

lead to a significant increase in market concentration” in any domestic market, “unless the acquiring and acquired person establish, by a preponderance of the evidence, that the effect of the acquisition will not be to tend to materially lessen competition or tend to create a monopoly or a monopsony.”¹²⁵ This part of the bill appears to codify the *Philadelphia National Bank* structural presumption found in the case law, but it does not specify the level or increase in concentration required for the presumption to apply. This part of the bill also seems quite useful, as it would prevent the courts at all levels from undermining or otherwise weakening the structural presumption, as some have favored.¹²⁶ If desired, the bill could enable a more assertive merger enforcement policy by requiring clear and convincing evidence to rebut the structural presumption.

Fourth, the bill would permit one of the federal enforcement agencies or a state attorney general (but not private plaintiffs) to challenge a merger where, as a consequence, the acquiring firm’s interest in the acquired firm exceeds an adjusted value of \$5 billion; or one of the merging firms has assets, net annual sales, or market capitalization exceeding \$100 billion; and if, as a result of the acquisition, the acquiring firm would hold an aggregate of voting securities and assets of the acquired firm exceeding \$5 billion.¹²⁷ If these absolute value thresholds are exceeded, then the merger is presumptively unlawful and the burden shifts to the proponent of the merger to establish by a preponderance of the evidence that the merger will not have the stated anticompetitive result. This provision does not require that the merging firms be competitors or potential competitors, or even in a supplier-customer relationship, provided the size thresholds are met.

Of course, a merger between noncompeting firms does not increase market concentration. We recommend that this bill be revised to more accurately address competition concerns without encompassing mergers that pose no threat to competition. Assuming that this provision is motivated by a concern about market concentration and market power, and the obstacles that the government faces when challenging mergers in court, we would prefer to see this provision revised to target horizontal mergers. For example, the bill could provide that the

125. S. 1812, 115th Cong. § 3 (2017).

126. As a notable example, in its public comments on the proposed 2010 Horizontal Merger Guidelines, the Antitrust Section of the American Bar Association took the position that “market concentration presumptions should be removed from the Merger Guidelines.” AM. B. ASS’N, *Comment on Proposed Horizontal Merger Guidelines* 12 (June 4, 2010), http://www.ftc.gov/sites/default/files/documents/public_comments/horizontal-merger-guidelines-review-project-proposed-new-horizontal-merger-guidelines-548050-00026/548050-00026.pdf [<http://perma.cc/5ZF8-DB7R>].

127. The \$100 billion and \$5 billion limits would automatically be adjusted annually based on the growth of the U.S. gross national product. S. 1812 § 3(3)(2)(B)(i).

government can establish a presumption that the merger violates Section 7 if the government can show that the merger would lead to a significant increase in concentration in any domestic market, so long as the alleged market is plausible. That would significantly reduce the burden on the government to define the relevant market in order to establish its *prima facie* case. Or the bill could specify that in order for the merging parties to rebut the government's presumption based on ease of entry, they must establish by clear and convincing evidence that entry will be timely, likely, and sufficient to deter or counteract the feared anti-competitive effects.¹²⁸

Lastly, the bill also contains a provision requiring ongoing postacquisition reporting for transactions resolved through a consent decree with the DOJ or the FTC.¹²⁹ The bill also would establish an Office of the Competition Advocate within the FTC.¹³⁰ The Competition Advocate's principal duty would be to listen to various interest groups and prepare reports about areas meriting antitrust investigation. We strongly support these activities, along with the Data Center called for within that Office. While the FTC already publishes numerous reports relating to general policy questions of this nature, the Office of the Competition Advocate would have subpoena authority to collect the information it needs, even if no litigation is pursued. This provision, if enacted, would fulfill a critical need by greatly improving the FTC's ability to perform merger retrospectives.

CONCLUSION

Merger analysis is almost always a predictive exercise involving considerable uncertainty. As a result, burdens of proof matter a great deal. The structural presumption—that a merger is anticompetitive if it leads to a significant increase in market concentration—has therefore proven essential to effective merger enforcement. This presumption is strongly supported by economic theory and evidence, as well as the experience gained in merger enforcement over the past fifty years. Furthermore, the existing case law, dating to the Supreme Court's landmark 1963 decision in *Philadelphia National Bank*, allows the DOJ, the FTC, state attorneys general, and the lower courts to apply the presumption more broadly

128. We assume that the bill is motivated by concerns about market power, rather than by other important concerns, such as the political power of large firms, a critical problem facing our democracy. We would strongly prefer that such concerns be addressed separately, for example through campaign finance reform, greater transparency, tougher ethics rules, or other legislation that addresses the problem more explicitly and more directly. Mixing up those concerns with competition concerns would, in our view, be counterproductive for solving both types of problems.

129. S. 1812 § 4.

130. *Id.* § 5.

and to make the presumption more difficult to rebut. In other words, although the structural presumption is by no means the only way for the government to successfully challenge a horizontal merger, it can be used more aggressively within current law.

More broadly, merger policy is one area where the courts have done a fairly good job of tracking prevailing economic thinking. This has been facilitated by the relatively general language of Section 7 of the Clayton Act, combined with the ability of the DOJ and the FTC, with their deep economic expertise and experience and strong links to academia, to incorporate advances in economic learning into their submissions to the courts. As a leading example of the flexibility of Section 7 of the Clayton Act, both the rise and subsequent decline of structuralism in merger enforcement were accomplished without significant reliance on statutory amendment.¹³¹

Section 7 also has proven quite able to accommodate “unilateral effects” theories, as they have developed over the past twenty-five years. Further, the courts have moved away from a regime in which efficiencies were either irrelevant or mergers were condemned because they would make the merged firm a stronger competitor, to one that contemplates an efficiency “defense.” Likewise, the courts both recognized and then later pulled back on various theories of potential competition. In short, the current language of the provision has proven to be remarkably flexible. Given that the concerns of merger policy are fundamentally economic, this flexibility is highly beneficial, especially when combined with guidance from the DOJ and the FTC that allows merging parties to predict how their proposed merger is likely to be greeted by the antitrust agencies and, if necessary, by the courts.

131. See HERBERT HOVENKAMP, *THE OPENING OF AMERICAN LAW: NEOCLASSICAL LEGAL THOUGHT, 1870-1970*, at 206-20 (2014).