

What Structural Presumption?: Reuniting Evidence and Economics on the Role of Market Concentration in Horizontal Merger Analysis

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The “structural presumption” is a proposition in antitrust law standing for the typical illegality of mergers that would combine rival firms with large shares of the same market. Courts and commentators are rarely precise in their use of the word “presumption” and there is foundational confusion about what kind of presumption this proposition actually entails. It could either be a substantive factual inference based on economic theory or a procedural device for artificially shifting the burden of production at trial. This Article argues that the substantive inference interpretation is the better reading of case law and the sounder application of the laws of antitrust and evidence. By instead interpreting the structural presumption as a formal rebuttable presumption, modern merger analysis needlessly complicates the use of market concentration evidence and may be systematically undervaluing the probative weight of this evidence. At least in this context, a formal presumption likely confers less evidentiary weight than a simple substantive inference.

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I. INTRODUCTION

The *structural presumption* is an important but contentious proposition in the antitrust law of horizontal mergers. It stands for the typical illegality of mergers that would combine rival firms with large shares of the same relevant market. The structural presumption is so named because the likely anticompetitive effects of such mergers are in some sense *presumed* to follow from the change in market *structure* involved in such consolidations. In one form or another, the structural presumption has undergirded all antitrust analysis of horizontal mergers since at least the early 1960s.

Today, the structural presumption is a topic of significant debate. Though well entrenched in legal precedent, the validity and normative desirability of this proposition are increasingly questioned. Proponents argue that mergers leading to strongly concentrated markets tend to lessen competition and harm consumers. On this basis, they support a presumption that mergers leading to highly concentrated markets should generally be prohibited, even if specific theories of competitive harm are not brought forward by the party seeking relief.¹ Opponents of the proposition argue that market structure should not be treated as determinative of the competitive consequences of a merger. They propose to eliminate any presumption of harm based on market concentration evidence and would generally require specific theories of harm to be raised as the basis for relief.²

As things stand, consensus is not forthcoming. Across numerous academic papers,³ conferences,⁴ formal speeches,⁵ informal commentaries,⁶ administrative statements,⁷ and

1. See, e.g., Steven C. Salop, *The Evolution and Vitality of Merger Presumptions: A Decision-Theoretic Approach*, 80 ANTITRUST L.J. 269, 271 (2015) (providing a decision-theoretic justification for reliance on a structural presumption of competitive harm in certain cases); Jonathan B. Baker & Carl Shapiro, *Reinvigorating Horizontal Merger Enforcement*, in HOW THE CHICAGO SCHOOL OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST 233 (Robert Pitofsky ed., 2008) (arguing for a strengthening of merger enforcement through partial restoration of the structural presumption and the need for strong evidence to overcome a prima facie case based on market concentration evidence). Note that these analyses take much more nuanced positions than this simple summary suggests.

2. See, e.g., Barry C. Harris & David D. Smith, *The Merger Guidelines v. Economics: A Survey of Economic Studies*, 1999 ANTITRUST REP. 23, 27 (1999) (arguing against the policy of presuming harm from market concentration evidence); Ky P. Ewing, Jr., *The Soft Underbelly of Antitrust: Some Challenging Thoughts for the New Millennium*, 1999 ANTITRUST REP. 2, 2–4 (1999) (criticizing reliance on market concentration in merger analysis); see also Michael G. Cowie & Paul T. Denis, *The Fall of Structural Evidence in FTC and DOJ Merger Review*, ANTITRUST SOURCE 3 (Feb. 2013) (interpreting antitrust agencies to be paying less attention to market concentration in their enforcement decisions); cf. John Harkrider, *Proving Anticompetitive Impact: Moving Past Merger Guidelines Presumptions*, 2005 COLUM. BUS. L. REV. 317, 319 (2005) (arguing against the presumption of harm, and in favor of specific theories of anticompetitive effects).

3. E.g., Jonathan B. Baker, *Market Concentration in the Antitrust Analysis of Horizontal Mergers*, in ANTITRUST LAW AND ECONOMICS 234 (Keith N. Hylton, ed. 2010); Jonathan B. Baker & Steven C. Salop, *Should Concentration be Dropped from the Merger Guidelines?*, 33 U. WEST. L.A. L. REV. 3 (2001); see also *supra* notes 1–2 (referencing arguments for and against this structural presumption).

4. E.g., Conference on the Fiftieth Anniversary of *United States v. Philadelphia National Bank*: The Past, Present, and Future of Merger Law, N.Y.U. (Nov. 15, 2013), <http://www.law.nyu.edu/conferences/us-vs-pnb>.

5. E.g., Joshua D. Wright, Comm’r, FED. TRADE COMM’N, *The FTC’s Role in Shaping Antitrust Doctrine: Recent Successes and Future Targets*, Remarks at the 2013 Georgetown Global Antitrust Symposium Dinner (Sept. 24, 2013), https://www.ftc.gov/sites/default/files/documents/public_statements/ftc%20%E2%80%99s-role-shaping-antitrust-doctrine-recent-successes-and-future-targets/130924globalantitrustsymposium.pdf.

6. E.g., Josh Wright, *The Guidelines Should be Revised to Reject the PNB Structural Presumption*, TRUTH ON THE MKT. (Oct. 26, 2009), <https://truthonthemarket.com/2009/10/26/the-guidelines-should-be>

judicial opinions,⁸ arguments have been forcefully articulated for and against the structural presumption with little to show for the exercise. The opposing sides are at an impasse, leaving unresolved the current and future significance of the structural presumption. This is an undesirable state of affairs for a proposition fundamental to the basic legality of business transactions that are often valued in millions to billions of dollars.

Clarity on the role and relevance of market concentration evidence is attainable, but not by continuing to debate the legal providence of using this evidence as the basis for a presumption of anticompetitive harm. Instead, this Article asks a more basic question: what kind of *presumption* is it that market concentration evidence supports in the first place? Courts and commentators are often imprecise in their language and procedure when it comes to presumptions,⁹ and treatment of the structural presumption is no exception. As this Article shows, debate over the use of market concentration evidence in the antitrust analysis of mergers can be focused—and largely resolved—by simply addressing a latent ambiguity in the conversation to date: namely, what do we mean when we say that evidence of undue concentration supports a presumption of competitive harm?

There are two basic possibilities. First, the structural presumption could be a substantive factual inference based on evolving economic theory and independently probative of the competitive consequences of a merger. In this sense, competitive harm is *presumed* to arise as a logical implication of the increase in market concentration caused by a merger of large rival firms. Second, the structural presumption could be a formal rebuttable presumption that artificially shifts the burden of production to the defendant when undue concentration is shown.¹⁰ In this sense, competitive harm is *presumed* by the mandate of a procedural device of administrative convenience, without direct reference to the probative value of the underlying evidence.

Intermediate combinations of these two extremes are also possible, but this Article supports no middle ground. While it is assumed today that the structural presumption is a formal rebuttable presumption, this Article argues that it is actually a simple substantive inference. The distinction is important, and more than academic.

First, this Article shows that the substantive inference interpretation is compelled by

revised-to-reject-the-pnb-structural-presumption/; D. Daniel Sokol, *Should the Philadelphia National Bank Presumption Be Abandoned or Allowed to Evolve?*, ANTITRUST & COMPETITION POL'Y BLOG (Sept. 30, 2013), http://lawprofessors.typepad.com/antitrustprof_blog/2013/09/should-the-philadelphia-national-bank-presumption-be-abandoned-or-allowed-to-evolve.html.

7. FED. TRADE COMM'N, Dissenting Statement of Commissioner Joshua D. Wright in the Matter of Fidelity National Financial, Inc. and Lender Processing Services, Inc. 1, 3–4 n.8 (Dec. 23, 2013), <https://www.ftc.gov/system/files/documents/cases/140305fidelitywrightstatement.pdf>.

8. *Compare* United States v. Baker Hughes Inc., 908 F.2d 981, 984 (D.C. Cir. 1990) (giving little apparent weight to market concentration evidence, described as merely “a convenient starting point” for analysis) *with* FTC v. H.J. Heinz Co., 246 F.3d 708, 717 (D.C. Cir. 2001) (giving ostensibly strong weight to market concentration evidence, with additional commentary that “[a]s far as we can determine, no court has ever approved a merger to duopoly under similar circumstances”).

9. 21B CHARLES ALAN WRIGHT ET AL., FEDERAL PRACTICE AND PROCEDURE: EVIDENCE § 5122.1 (2d ed. 2012) (commenting that inconsistent use of the term *presumption* has by some accounts rendered the word “all but meaningless”).

10. *Cf.* FED. R. EVID. 301 (describing the treatment of burden-shifting presumptions under the Federal Rules of Evidence).

an honest reading of decades of controlling case law in antitrust. That is, the thesis of this Article is not merely an economic or theoretical argument. The need to treat the structural presumption as a substantive factual inference is a practical statement of merger law and should be followed by courts and litigants when considering the antitrust legality of horizontal mergers.

Second, even beyond the specific antitrust case law on point, interpreting the structural presumption as a simple factual inference is the better practice as a matter of general legal principles. The substantive inference interpretation reflects economic theory, the substantive law of antitrust, and the procedural law of evidence for a fact like market concentration. By contrast, the structural presumption interpretation distorts and confuses the relevance of market concentration evidence under both substantive and procedural law.

Third, the distinction is of practical importance. Interpreting the structural presumption as a rebuttable legal presumption complicates horizontal merger analysis without providing any benefit to justify the cost. This interpretation also perniciously obscures the probative value of market concentration evidence, likely leading to the systematic undervaluation of this evidence by courts and analysts. Paradoxically, creating a formal rebuttable presumption does not have the expected effect of imbuing weak evidence with artificial weight in this setting. Instead, it actually weakens the natural evidentiary weight of intrinsically probative evidence.

Interpreting the structural presumption as a substantive inference corrects these problems. It also narrows and significantly resolves the extant debate on the validity and future viability of the structural presumption in merger law. Resolution of uncertainty over the role of market concentration evidence in merger analysis is immediate: this evidence supports a substantive economic inference about the competitive consequences of a merger. Further economic inquiry into the value and limits of market concentration evidence as a predictor of anticompetitive harm is needed, but all remaining questions are *economic* in nature. This Article obviates future *legal* debates about the calibration or utility of formal burden-shifting devices on this topic. Market concentration evidence deserves no more and no less than its own intrinsic probative value as evidence.

The remainder of this Article presents the argument outlined above. The question—*what structural presumption?*—is posed in Part II. Context on the concept of market concentration is related to the different *presumptions* that this evidence might support. The following sections then compare the substantive inference and rebuttable presumption interpretations of the structural presumption, arguing in favor of the former. Part III traces the history of the structural presumption in case law, showing that the presumption is more naturally interpreted as a substantive inference than a formal burden-shifting presumption. Part IV combines current economic thinking with close attention to the rules of evidence on presumptions to show that interpreting the structural presumption as a substantive inference better fits the relevant procedure and substantive goals of antitrust law. Part V compares the normative desirability of each approach to the structural presumption. The rebuttable presumption interpretation is shown to have no advantages over the substantive inference interpretation, but many disadvantages. A brief conclusion responds to potential criticisms and proposes to restore appropriate weight to market concentration evidence by reviving the historic substantive inference approach to evidence of undue concentration.

II. THE QUESTION POSED

Under Section 7 of the Clayton Act—the principal statutory basis for antitrust merger analysis in the United States—a merger is illegal if its effect “may be substantially to lessen competition, or to tend to create a monopoly.”¹¹ Since at least the 1963 decision of *United States v. Philadelphia National Bank*,¹² courts and analysts have looked to market concentration evidence as a primary source of information on the likely competitive consequences of a merger. This is particularly true in the case of horizontal mergers: mergers of competitors in the same relevant market. In contemporary language, evidence that a horizontal merger will result in undue concentration is said to support a *structural presumption* that the merger is likely to have anticompetitive effects.¹³ Relief from such a finding may include injunction of the merger, divestitures, or other remedies.

But the importance of the structural presumption in both historic and contemporary merger analysis belies lurking uncertainty about what exactly is being presumed when undue concentration is proved. There are multiple senses in which market concentration evidence could be said to support a *presumption* of anticompetitive effects and only limited appreciation of this complexity in merger case law and the academic literature. Clarity on the role of market concentration evidence in horizontal merger analysis requires first-order agreement on what kind of presumption this evidence is meant to support. As this Article demonstrates, a wrong answer poses serious problems for the antitrust analysis of horizontal mergers.

A. Market Concentration Evidence

In the abstract, *market concentration* contemplates a classification of market structures along a one-dimensional spectrum of competitive dispersion. At one extreme of the spectrum is a perfectly competitive market: for example, an infinite number of price-taking wheat farmers. At the other extreme lies a single price-setting monopolist: the clearest example is a firm with government-granted exclusivity in its market. Oligopolistic market structures fall somewhere between these two extremes, with markets consisting of many small firms falling closer to the perfectly competitive side and markets consisting of large duopolies falling closer to the monopoly side. This spectral concept of market concentration is theoretically attractive but admits no perfect empirical analog.

In practice, courts and scholars rely on a wide array of quantifiable measurements to approximate the abstract concept of market concentration. Consider a merger of the largest two firms in a market consisting of seven firms with the following shares: 35%,

11. Clayton Act, ch. 323, § 7, 38 Stat. 730, 731–32 (1914) (current version at 15 U.S.C. § 18 (2012)). This standard is generally thought to differ from the prohibitions of Sections 1 and 2 of the Sherman Act, ch. 647, §§ 1–2, 26 Stat. 209, 209 (1890) (current version at 15 U.S.C. §§ 1–2 (2004)), in that Section 7’s incipency standard (“*may* be substantially to lessen”) (emphasis added) allows mergers to be prohibited on proof of probable anticompetitive effects as opposed to actual anticompetitive effects. *Brown Shoe Co. v. United States*, 370 U.S. 294, 323 (1962); *see also United States v. Koppers Co.*, 202 F. Supp. 437, 439–40 (W.D. Pa. 1962) (discussing the legislative history of the Clayton Act).

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

13. *See Baker*, *supra* note 3, at 2 (discussing market concentration evidence and the structural presumption of competitive harm in merger analysis).

20%, 15%, 10%, 10%, 5%, and 5%. Common descriptions of the merger's effect on market concentration include market shares in output or sales revenue (i.e., the merger leads to a combined firm with a 55% share of the market), the number of remaining firms (i.e., this is a seven-to-six merger), the four-firm concentration ratio (i.e., the merger increases the C4 index from 80% to 90%), and the Herfindahl-Hirschman index (HHI) (i.e., the merger raises the HHI from 2100 to 3500).¹⁴ Each of these empirical measurements focuses on a slightly different aspect of the change in market structure caused by the merger, but all capture the basic idea that the post-merger market is more concentrated than before.

Economic research has long drawn a causal relationship between market concentration and firm behavior. In the 1950s and 1960s, the predominant view was that even moderate increases in market concentration would tend to cause substantial reductions in competition.¹⁵ Stigler, for example, suggested in 1955 that sound economics supported the prohibition of most mergers involving a firm with more than a 20% share of the relevant market.¹⁶ The rise of Chicago-school economics and empirical critiques of concentration-profit studies during the 1970s and 1980s precipitated an economic withdrawal from confidence in the structure-conduct relationship,¹⁷ but the change was more in degree than conclusion. The rapid introduction of game theory into industrial organization economics in the 1980s and 1990s reestablished the causal link between increased concentration and decreased competition in many models.

It is safe to say that mainstream economic thinking currently holds that substantial changes in concentration have at least a modest causal relationship to the likelihood of anticompetitive effects in many circumstances.¹⁸ The strength of this relationship is subject to various influences such as the ease and credibility of entry and repositioning, the existence of factors conducive of coordinated behavior, and the basic nature of

14. See JEAN TIROLE, *THE THEORY OF INDUSTRIAL ORGANIZATION* § 5.5 (1988) (discussing the abstract theory and measurement of market concentration and summarizing important works in this literature). For a historic perspective, see also Gideon Rosenbluth, *Measures of Concentration*, in *BUSINESS CONCENTRATION AND PRICE POLICY* 57 (1955) (describing concentration indexes); Tibor Scitovsky, *Economic Theory and the Measurement of Concentration*, in *BUSINESS CONCENTRATION AND PRICE POLICY* 101 (1955) (discussing the effects of market concentration on competition). For a gentler introduction to the idea of market concentration, see OZ SHY, *INDUSTRIAL ORGANIZATION: THEORY AND APPLICATIONS* 171–73 (1995).

15. See, e.g., George J. Stigler, *Mergers and Preventive Antitrust Policy*, 104 U. PA. L. REV. 176, 181–82 (1955) [hereinafter Stigler, *Mergers and Preventive Antitrust Policy*] (providing simple concentration-based rules for identifying potentially anticompetitive mergers); see generally George J. Stigler, *A Theory of Oligopoly*, 72 J. POL. ECON. 44 (1964); George J. Stigler, *Introduction* to *BUSINESS CONCENTRATION AND PRICE POLICY* (1955); CARL KAYSEN & DONALD F. TURNER, *ANTITRUST POLICY: AN ECONOMIC AND LEGAL ANALYSIS* (1959); Jesse W. Markham, *Merger Policy under the New Section 7: A Six-Year Appraisal*, 43 VA. L. REV. 489 (1957).

16. Stigler, *Mergers and Preventive Antitrust Policy*, *supra* note 15, at 182.

17. See, e.g., Harold Demsetz, *Two Systems of Belief About Monopoly*, in *INDUSTRIAL CONCENTRATION: THE NEW LEARNING* 164 (Harvey J. Goldschmid et al. eds., 1974) (explaining this critique).

18. See, e.g., TIROLE, *supra* note 14 and accompanying text, §§ 5–7; Louis Kaplow & Carl Shapiro, *Antitrust* 35–36, 59–74 (Harvard John M. Olin Discussion Paper Series, Discussion Paper No. 575, 2007), http://www.law.harvard.edu/programs/olin_center/papers/pdf/Kaplow_Shapiro_575.pdf; Carl Shapiro, *Theories of Oligopoly Behavior*, in *HANDBOOK OF INDUSTRIAL ORGANIZATION* 329 (Richard Schmalensee & Robert Willig eds., 1989); Baker & Shapiro, *supra* note 1; Baker & Salop, *supra* note 3; SHY, *supra* note 14, at 171–206; see generally Raymond Deneckere & Carl Davidson, *Incentives to Form Coalitions with Bertrand Competition*, 16 RAND J. ECON. 473 (1985).

competition in the market.¹⁹ But as a general proposition, few would deny that a sufficiently large increase in market concentration is probative of likely anticompetitive harm.²⁰ This inference may be drawn circumstantially, without reference to specific theories of harm, or it may be drawn directly, by treating market concentration as a factor that strengthens a specific theory of competitive harm.²¹

B. The Structural Presumption

Economic thinking on the relevance of market concentration as a predictor of the likely anticompetitive effects of a merger has long been a part of horizontal merger review in the courts. In *Brown Shoe Company v. United States*, the Supreme Court's first merger case following major amendment of the Clayton Act in 1950,²² the Court twice cited Stigler's 1955 article for the importance of market concentration as a factor in merger review.²³ A year later in *United States v. Philadelphia National Bank*, the Court again cited Stigler and several other economists in support of the following proposition:

[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 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.²⁴

This language in *Philadelphia National Bank* is now the well-settled citation for the structural presumption in merger analysis. Parsing the exact meaning of *Philadelphia National Bank* is the subject of much of Part III of this Article. For now, however, it is important to note that the structural presumption includes at least one other important source of authority. In its 1990 disposition of *United States v. Baker Hughes*, the D.C.

19. See generally *supra* note 18 (concerning the connection between market concentration and potential competitive harm from mergers).

20. See Salop, *supra* note 1, at 277 n.45–46 (noting a number of economic studies which support some form of anticompetitive-effect inference from sufficient market concentration evidence).

21. See, e.g., Baker & Salop, *supra* note 3, at 8 (noting that market concentration is relevant to both coordinate and unilateral theories of harm under a variety of models and assumptions); see generally Martin Dufwenberg & Uri Gneezy, *Price Competition and Market Concentration: An Experimental Study*, 18 INT'L J. INDUS. ORG. 7 (2000) (relating concentration to the likelihood of coordinated conduct); cf. John Kwoka, Professor Econ. Northwestern U. Some Thoughts on Concentration, Market Shares, and Merger Enforcement Policy at the FTC/DOJ Workshop on Merger Enforcement 1 (Feb. 17, 2004), <https://www.justice.gov/sites/default/files/atr/legacy/2007/08/30/202602.pdf> (noting that different measures of market concentration relate differently to different specific theories of harm). But see generally Joseph Farrell & Carl Shapiro, *Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition*, 10 B.E. J. THEORETICAL ECON. 1 (2010) (suggesting that upward pricing pressure is a better indicator of anticompetitive effects than market concentration in most unilateral effects models).

22. Celler-Kefauver Act, ch. 1184, 64 Stat. 1125 (1950) (current version at 15 U.S.C. §§ 18, 21 (2000)); see generally Note, *Section 7 of the Clayton Act: A Legislative History*, 52 COLUM. L. REV. 766 (1952) (examining and interpreting the legislative history of the Clayton Act).

23. *Brown Shoe Co. v. United States*, 370 U.S. 294, 332 n.56, 334 n.61 (1962) (citing Stigler, *Mergers and Preventive Antitrust Policy*, *supra* note 15); see also *Brown Shoe*, 370 U.S. at 322 n.38 (commenting that market concentration is the “primary index of market power” but must be assessed relative to the market in question).

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

Circuit provided what is now black-letter law on the structural presumption in horizontal merger analysis:

By showing that a transaction will lead to undue concentration . . . the government establishes a presumption that the transaction will substantially lessen competition. The burden of producing evidence to rebut this presumption then shifts to the defendant. If the defendant successfully rebuts the presumption, 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.²⁵

Philadelphia National Bank and *Baker Hughes* represent fundamentally different approaches to the use of market concentration evidence in Section 7 litigation. The difference is the type of presumption that each entails. *Philadelphia National Bank* describes a substantive inference based on economic theory, while *Baker Hughes* articulates a rebuttable presumption divorced from the specific probative value of market concentration evidence.

C. Evidentiary Presumptions

In the half-century since 1963, courts and commentators have done little to clarify the type of presumption that proof of undue concentration is meant to support.²⁶ Among the possible interpretations of *presumption* in legal contexts,²⁷ only two are relevant to the remainder of this Article. These are (1) a substantive factual inference, and (2) a burden-shifting rebuttable presumption. The differences between these interpretations are subtle but important.

1. Substantive Factual Inferences

The plaintiff in a Section 7 case always bears the initial burden of producing evidence that a merger may be “substantially to lessen competition, or to tend to create a monopoly.”²⁸ In modern terminology, the plaintiff must produce evidence of likely anticompetitive effects. In a jury trial, this *burden of production* is sustained by adducing evidence sufficient to allow a reasonable jury to infer the likely anticompetitive effects of

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

26. *Cf.* Charles V. Laughlin, *In Support of the Thayer Theory of Presumptions*, 52 MICH. L. REV. 195, 195 (1953) (commenting that “the word [presumption] has been so promiscuously used as to be devoid of much of its utility”); Ronald J. Allen, *Presumptions in Civil Actions Reconsidered*, 66 IOWA L. REV. 843, 844 (1981) (quoting Learned Hand on the legal meaning of “presumption” as saying “Judges have mixed it up until nobody can tell what on earth it means”).

27. *See* Laughlin, *supra* note 26, at 196–205 (noting eight senses in which the word “presumption” is used by courts: (1) a general disposition of courts, (2) an authoritative reasoning principle, (3) a rule of substantive law, (4) a rule fixing the burden of persuasion, (5) a permissible inference, (6) a statutory prima facie case, (7) a proposition of judicial notice, and (8) a rule shifting the burden of producing evidence).

28. *See supra* note 9 (commenting that inconsistent use of the term *presumption* has by some accounts rendered the word “all but meaningless”).

a merger;²⁹ in the typical Section 7 bench trial, the standard may be higher.³⁰ Framed in the negative, the burden of production is sustained when the plaintiff has proffered enough evidence to survive an adverse motion for directed verdict at the close of its case in chief, sometimes referred to as making out a prima facie case.³¹

Such a proof may be constructed with either direct or circumstantial evidence.³² In the merger context, demonstrating that a merger would result in undue market concentration exemplifies the latter mode of proof. As the preceding discussion of economic thinking explains, evidence that a merger will cause a substantial increase in market concentration supports a substantive (economic) inference that the merger is likely to have anticompetitive effects.³³ There is no settled terminology to describe this type of substantive factual inference, which will be referred to in this Article as simply a *substantive inference*. In other contexts and jurisdictions, the same idea may be termed a circumstantial inference, a permissible inference, a presumed factual inference supported by evidence of market concentration, a presumption in the form of *res ipsa loquitur*,³⁴ or simply a presumption as the term is used in common parlance.

Regardless of the language used, the effect of the plaintiff sustaining the burden of production depends on the strength of the showing. If the proof of anticompetitive consequences is so strong that a verdict would be directed in the plaintiff's favor if the defendant did not come forward with contrary evidence, then the demonstration could be said to shift the burden of production to the defendant.³⁵ If the plaintiff's proof permits, without compelling, the inference of likely anticompetitive consequences, then the defendant's obligation to produce contrary evidence is merely the risk that the plaintiff's argument will be found persuasive if left unrefuted. This obligation is sometimes referred to as the *burden of going forward* with the evidence.³⁶

29. See, e.g., 2 MCCORMICK ON EVIDENCE § 338 (Kenneth S. Broun et al. ed., 7th ed. 2013) (describing the burden of production).

30. In a bench trial, the court is not generally bound to the "reasonable jury" standard in making this determination. Cf. FED. R. CIV. P. 52(c) and advisory committee's notes on the 1991 amendment.

31. See, e.g., MCCORMICK ON EVIDENCE, *supra* note 29, § 342, at 676, n.4 (describing the use of the phrase "prima facie").

32. E.g., *id.*, § 338, at 653–56.

33. See *supra* notes 15–21 and accompanying text (discussing the evolution of economic thinking on the relevance of changes in market concentration in predicting the competitive effects of horizontal mergers).

34. MCCORMICK ON EVIDENCE, *supra* note 29, § 342, at 678–79 (distinguishing this inference from a true presumption); KENNETH S. ABRAHAM, THE FORMS AND FUNCTIONS OF TORT LAW 95–102 (3d ed. 2007) (questioning the doctrine of *res ipsa loquitur* as little more than a description of circumstantial evidence sufficient to satisfy the burden of production); see also Daniel J. Pylman, *Res Ipsa Loquitur in the Restatement (Third) of Torts: Liability Based Upon Naked Statistics Rather Than Real Evidence*, 84 CHI.-KENT L. REV. 907, 913 (2010) (categorizing the *res ipsa loquitur* proposition as a probabilistic inference); Wex S. Malone, *Res Ipsa Loquitur and Proof by Inference—A Discussion of the Louisiana Cases*, 4 LA. L. REV. 70, 70–72 (1941) (noting that *res ipsa loquitur* has little to distinguish it from a standard circumstantial inference).

35. MCCORMICK ON EVIDENCE, *supra* note 29, at 657. Prior to its amendment in 1991, Federal Rule of Civil Procedure 41(b) required the court in a non-jury trial to weigh the plaintiff's evidence on the merits on a motion for dismissal. See Brief for Pabst Brewing Company at *23, *United States v. Pabst Brewing Co.*, 384 U.S. 546 (1966) (No. 404), 1966 WL 115448 (summarizing how the rules were amended). Under this standard, the plaintiff's satisfaction of the burden of production would effectively shift the burden of production to the defendant.

36. MCCORMICK ON EVIDENCE, *supra* note 29, at 657.

2. Rebuttable (Burden-Shifting) Presumptions

The evidentiary role of substantive inferences—logical conclusions drawn from evidence of independent probative value—contrasts with that of formal *rebuttable presumptions*. The latter are sometimes referred to as burden-shifting presumptions, or “true presumptions” in contrast to substantive inferences.³⁷ Unlike substantive inferences, where the probative value of the underlying evidence is the thing that shifts the burden to the defendant, rebuttable presumptions are structures of legislative or judicial creation that shift the burden of production by rule of law.

In a rebuttable presumption framework, producing evidence sufficient to prove some *basic fact* has the legal effect of causing a *presumed fact* to be compulsorily inferred unless rebutted by the party against whom the presumption operates.³⁸ Apart from the probative value of the basic fact evidence, considerations of fairness, access to proof, procedural ease, and social policy guide the construction of rebuttable presumptions³⁹ with the effect that basic facts sufficient to activate rebuttable presumptions may have little to no independent value as substantive proof of the presumed facts.⁴⁰

If the defendant fails to come forward with evidence of its own at the close of the plaintiff’s case in chief, the operation of a rebuttable presumption is to establish a potentially compulsory inference. Proof of the basic fact in the presumption *requires* the fact-finder to infer the presumed fact and anything following from it.⁴¹ For example, under an old common-law presumption, proof that a person disappeared and has been absent and unheard of for seven years (the basic fact) would require a finding that the person has died during this absence (the presumed fact), unless this conclusion is rebutted by some contravening explanation for the absence.⁴²

A rebuttable presumption activates upon the production of evidence of the basic fact. Confusingly, this is often referred to as a *prima facie* showing.⁴³ Activation is said to shift the burden of production from the plaintiff to the defendant, but the actual effect is a bit more subtle. At the close of the plaintiff’s case in chief, proof of the basic fact is

37. *Id.* § 342.

38. The language of *basic facts* and *presumed facts* is ostensibly due to Edmund M. Morgan, *Foreword to MODEL CODE OF EVIDENCE* 52–54 (AM. LAW INST. 1942).

39. See MCCORMICK ON EVIDENCE, *supra* note 29, §§ 337, 343 (discussing various policy objectives that might motivate the creation of a rebuttable presumption).

40. See, e.g., WRIGHT ET AL., *supra* note 9, at n.78 (“[The] presumption has no probative value but merely allows factfinder to reach conclusion in absence of proof to the contrary.”) (citing *Jones v. LSU/EA Conway Med. Ctr.*, 46 So. 3d 205, 211 (La. Ct. App. 2010)). *But cf.* *Pennzoil Co. v. Fed. Energy Regulatory Comm’n*, 789 F.2d 1128, 1137 (5th Cir. 1986) (noting that the presumed fact could still be inferred from the basic fact if an independent probative basis existed to support the inference).

41. See WRIGHT ET AL., *supra* note 9, at 422 (citing CHARLES TILFORD MCCORMICK, *HANDBOOK OF THE LAW OF EVIDENCE* § 310 (1954)); EDMUND MORRIS MORGAN, *BASIC PROBLEMS OF EVIDENCE* 41–42 (1961); JAMES BRADLEY THAYER, *A PRELIMINARY TREATISE ON EVIDENCE AT THE COMMON LAW* 336 (1898); 9 WIGMORE ON EVIDENCE § 2490 (3d ed. 1940)); *cf.* CHRISTOPHER B. MUELLER & LAIRD C. KIRKPATRICK, 1 *FEDERAL EVIDENCE* § 3:7 (3d ed. 2012) (noting a distinction between a presumption that affects only the burden of production, a presumption that affects the burden of persuasion, and various intermediate possibilities).

42. See MCCORMICK ON EVIDENCE, *supra* note 29, § 343, at 686–87, n.18–21; Frances T. Freeman Jalet, *Mysterious Disappearance: The Presumption of Death and the Administration of the Estates of Missing Persons or Absentees*, 54 IOWA L. REV. 177, 207 (1968).

43. BRYAN A. GARNER, “*prima facie case*”, GARNER’S DICTIONARY OF LEGAL USAGE 704 (3d ed. 2011).

still generally a fact question, and the compulsory inference never vests if the fact-finder is not ultimately persuaded of the basic fact. Unless proof of the basic fact is overwhelming, evidence of the basic fact in a rebuttable presumption thus operates more like the shift of a burden of going forward than as a true shift of the burden of production, at least as the terms are used above.⁴⁴

Little changes if the defendant seeks to rebut the presumption by disproving the basic fact. Unless the defendant's rebuttal evidence is overwhelming, the basic fact remains a fact question informed by both the plaintiff's and defendant's presentations of evidence.⁴⁵ As before, a finding of the basic fact compels a finding of the presumed fact and anything it implies under the substantive law. Also as before, a finding against the basic fact establishes no presumption in the first place, and absent some other evidence in demonstration of the presumed fact, the plaintiff will likely suffer an adverse directed verdict.

If the defendant instead seeks to rebut the presumption by disproving the presumed fact, things become more complicated. Courts and scholars disagree on what effect evidence in rebuttal of the presumed fact has on a rebuttable presumption.⁴⁶ In the majority of jurisdictions following the *Thayer-Wigmore* school of thought, the defendant's satisfaction of its burden of production with *any* evidence contrary to the presumed fact destroys the presumption entirely.⁴⁷ This is sometimes referred to as the "bubble-bursting" theory of rebuttable presumptions.⁴⁸

In jurisdictions following the competing *Morgan-McCormick* school of thought, rebuttable presumptions are more durable and actually shift the burden of *persuasion* to the defendant on the issue of the presumed fact.⁴⁹ In this setting, the defendant's satisfaction of its burden of production by producing evidence contrary to the presumed fact only establishes a fact question on the presumed fact.⁵⁰ Finally, in federal courts, Rule of Evidence 301 provides a statutory procedure for the treatment of rebuttable presumptions in civil suits: "the party against whom a presumption is directed has the

44. See *supra* notes 35–36 and accompanying text (describing the burden-shifting effect of producing basic-fact evidence in a rebuttable presumption).

45. See WRIGHT ET AL., *supra* note 9, at 427 ("[U]nless the defendant's evidence is so overwhelming that the judge must direct a verdict for him on the issue, all contrary evidence on the basic fact does is to create a jury question on the issue of the existence of the presumption.").

46. See Edward W. Cleary, *Presuming and Pleading: An Essay on Juristic Immaturity*, 12 STAN. L. REV. 5, 15–20 (1959) (exploring in detail the different standards by which a rebuttal argument might be assessed).

47. JAMES B. THAYER, A PRELIMINARY TREATISE ON EVIDENCE AT THE COMMON LAW 336–39 (1898); WIGMORE ON EVIDENCE, *supra* note 41, § 2491; see MCCORMICK ON EVIDENCE, *supra* note 29, § 344, at 692–95.

48. See FED. R. EVID. 301, Advisory Committee Notes to the 1972 Proposed Rules (citing Edmund M. Morgan & John MacArthur Maguire, *Looking Backward and Forward at Evidence*, 50 HARV. L. REV. 909, 913 (1937)); MCCORMICK ON EVIDENCE, *supra* note 29, § 344, at 692; D. Craig Lewis, *Should the Bubble Always Burst? The Need for A Different Treatment of Presumptions Under IRE 301*, 32 IDAHO L. REV. 5, 6 (1995) ("[Sustaining the burden of production on rebuttal means the] 'bubble bursts'—the presumption disappears, and the factual issue addressed by the presumption is decided based solely on the evidence presented concerning the issue.").

49. Edmund M. Morgan, *Some Observations Concerning Presumptions*, 44 HARV. L. REV. 906, 929 (1931); Morgan & Maguire, *supra* note 48, at 912–13.

50. See MCCORMICK ON EVIDENCE, *supra* note 29, § 344 (describing the operation of presumptions in civil cases).

burden of producing evidence to rebut the presumption. But this rule does not shift the burden of persuasion, which remains on the party who had it originally.”⁵¹ Rule 301 is often cited as a “bubble-bursting” rule,⁵² but the legislative history of this rule leaves substantial room for interpretation.⁵³

If this brief overview of the procedure of rebuttable presumptions is dense and difficult to follow, then it aptly conveys the reality of the subject matter. The apparent simplicity of the rebuttable presumption framework belies exhausting complexity in the details.

D. Competing Interpretations

McCormick famously complained that “‘presumption’ is the slipperiest member of the family of legal terms, except its first cousin, ‘burden of proof.’”⁵⁴ This sentiment aptly characterizes the state of the structural presumption in horizontal merger analysis. The remainder of this Article addresses a latent ambiguity in current applications of the structural presumption: namely, uncertainty about what kind of presumption the structural presumption entails.

The modern structural presumption framework, articulated by the D.C. Circuit in *Baker Hughes*, arguably fits the burden-shifting model of a rebuttable presumption under Rule 301.⁵⁵ One possibility is thus that the structural presumption is a formal burden-shifting rebuttable presumption. By the language of modern merger cases, one would be forgiven for thinking this interpretation entirely beyond dispute.

However, this Article argues that the better understanding of the structural presumption is as a simple substantive inference. The next Part of this Article revisits the case law history of the structural presumption to argue that the still-controlling authority of *Philadelphia National Bank* actually articulates a substantive inference—not a rebuttable presumption. Parts IV and V defend the substance of this interpretation on positive and normative grounds, respectively.

III. THE CASE LAW HISTORY

Context for any review of horizontal merger case law is the Supreme Court’s effective abandonment of this subject matter after a period of activism in the 1960s and early 1970s. While lower courts have continued to evolve this area of law, old Supreme Court cases are still controlling authority on much of the modern framework. Given the

51. FED. R. EVID. 301.

52. See *Pennzoil Co. v. Fed. Energy Regulatory Comm’n*, 789 F.2d 1128, 1137 n.24 (5th Cir. 1986) (collecting circuit opinions interpreting Rule 301 as a “bubble-bursting” analogy); see also G. Michael Fenner, *Presumptions: 350 Years of Confusion and It Has Come to This*, 25 CREIGHTON L. REV. 383, 389 (1992) (describing Rule 301 as the “bursting bubble” rule); Lewis, *supra* note 48, at 6 (identifying Rule 301 as the “bubble bursting” approach).

53. As Congress intervened to alter the original Morgan–McCormick style of presumption adopted by the Supreme Court, the meaning of Rule 301 is arguably best understood by reference to the Conference Committee Report that led to the altered rule. H.R. CONF. REP. NO. 1597, 1974 U.S.C.A.N. 7098, 7099. For careful discussion and interpretation, see generally WRIGHT ET AL., *supra* note 9, § 5122.2; MUELLER & KIRKPATRICK, *supra* note 41, § 3:1.

54. MCCORMICK ON EVIDENCE, *supra* note 29, § 342.

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

frequency with which it is cited for the proposition, one would thus suppose that *Philadelphia National Bank* put forth the modern burden-shifting structural presumption. But as this Part shows, the *presumption* that *Philadelphia National Bank* articulates is actually a simple substantive inference. In reviewing the case law history of the structural presumption, the burden-shifting interpretation does not appear until the late 1980s or early 1990s, and its leading expression in *Baker Hughes* is essentially novel law.

A. The 1960s (Philadelphia National Bank)

Like so much of modern horizontal merger analysis,⁵⁶ the history of the structural presumption starts with the 1962 case of *Brown Shoe Company v. United States*.⁵⁷ This case, the Court's first commentary on the role of market concentration evidence under the revised Section 7, is important mainly in the negative sense of what it doesn't say. *Brown Shoe* is deferential to market concentration evidence, but only in the sense of recognizing it as one important factor among many.⁵⁸

In terms of its contribution to the structural presumption, *Brown Shoe* can be read for two propositions. First, the probative value of market concentration evidence is derived in large part from economic reasoning. The opinion cites Stigler for economic confidence in the strong relationship between high market concentration and the likely anticompetitive consequences of a merger.⁵⁹ Second, market concentration evidence is an important factor among others to be considered in the review process. In a footnote, the opinion asserts that "[s]tatistics reflecting the shares of the market controlled by the industry leaders and the parties to the merger are, of course, the primary index of market power."⁶⁰ But the opinion immediately qualifies this statement by going on to caution that market share statistics do not exist in a vacuum and that full examination of a market's "structure, history and probable future" is needed to determine the likelihood of anticompetitive effects in Section 7 analysis.⁶¹

It is against this backdrop that the Court's commentary on the role of market concentration evidence in *United States v. Philadelphia National Bank* must be read.⁶² As previously noted, one passage from *Philadelphia National Bank* is now accepted as the settled citation for the structural presumption. The full passage is as follows:

[I]ntense congressional concern with the trend toward concentration warrants dispensing, in certain cases, with elaborate proof of market structure, market behavior, or probable anticompetitive effects. Specifically, we 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

56. See, e.g., Robert A. Skitol & Kenneth M. Vorrasi, *The Remarkable 50-Year Legacy of Brown Shoe Co. v. United States*, 26 ANTITRUST 47, 47 (2012) (identifying this case as "the most important merger law decision ever issued").

57. *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962).

58. See 4 PHILLIP E AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 902c (3d ed. 2006) (providing a similar interpretation).

59. *Brown Shoe*, 370 U.S. at 332 n.56, 334 n.61 (citing Stigler, *Mergers and Preventive Antitrust Policy*, *supra* note 15).

60. *Id.* at 322 n.38.

61. *Id.*

62. *United States v. Phila. Nat'l Bank*, 374 U.S. 321 (1963).

firms in that market is so inherently likely 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.⁶³

Today, this statement is widely assumed to mean that evidence of undue concentration activates a rebuttable presumption of likely anticompetitive effects.⁶⁴ It may thus come as a surprise that the case contains no discussion of rebuttable presumptions whatsoever. In fact, read comprehensively and in full historical context, *Philadelphia National Bank* is best understood as simply articulating a substantive inference that courts would be permitted to draw upon finding that a merger would lead to undue concentration.

The probative value that *Philadelphia National Bank* attributes to evidence of undue concentration explicitly derives from economic thinking on the relationship between market concentration and anticompetitive harm.⁶⁵ The primary authorities the case cites for the structural presumption are scholarly works by Stigler, Kaysen, Turner, and Markham.⁶⁶ Each of these works expresses confidence in the probative value of market concentration as evidence of likely anticompetitive effects, and each proposes some threshold level of market concentration beyond which a merger could be deemed likely to have anticompetitive effects even without further proof.⁶⁷

The most natural reading of this structural *presumption* is as a permissible substantive inference. The inference is *substantive* in the sense that the likely anticompetitive effects of a merger are inferred circumstantially from economic reasoning on the value of market concentration evidence. The inference is *permissible* in the sense that the potential anticompetitive consequences of a merger may be inferred from market concentration evidence without further inquiry into the other factors discussed in *Brown Shoe*.

Indications that the Court meant to draw a substantive inference from market concentration evidence are evident on the face of the opinion. For example, in defining the test of *undue* concentration, the Court refers to concentration thresholds proposed by economists for predicting whether a merger would have anticompetitive effects.⁶⁸ In explaining the limits of the structural presumption, the opinion further states that it “lightens the burden of proving illegality only with respect to mergers whose size makes them inherently suspect.”⁶⁹ Similarly, in its findings on the actual facts of the case, the Court explains that prior case law and the above-noted economic authorities support “*the inference we draw* in the instant case from the [market concentration] figures disclosed

63. *Id.* at 363.

64. *See, e.g.*, *United States v. United Tote, Inc.*, 768 F. Supp. 1064, 1068 (D. Del. 1991) (“If it demonstrates that the merger further consolidates an already highly concentrated market for a given product, the Government establishes a rebuttable presumption that the merger is illegal under Section 7.”).

65. *Cf.* Thomas E. Kauper, *Influence of Conservative Economic Analysis on the Development of the Law of Antitrust*, in *HOW THE CHICAGO SCHOOL OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST* 43 (Robert Pitofsky ed., 2008) (commenting that among important antitrust cases of the 1950s and 1960s, only *Philadelphia National Bank* rested on economic analysis).

66. *Phila. Nat'l Bank*, 374 U.S. at 363–64 & n.38–39, 41 (citing Stigler, *Mergers and Preventive Antitrust Policy*, *supra* note 15; KAYSSEN & TURNER, *supra* note 15; Markham, *supra* note 15).

67. *Id.* at 364 n.41 (describing the market concentration thresholds suggested by different economists).

68. *Id.*

69. *Id.* at 363.

by the record.”⁷⁰

By contrast, a number of considerations militate against reading *Philadelphia National Bank* as creating a burden-shifting rebuttable presumption. First, nothing in the opinion expressly states the creation of a rebuttable presumption.⁷¹ The Court never uses the word “presumption” and never refers to burden-shifting of any form. The absence of any explicit mention of presumptions or burden-shifting would be only natural in a case articulating a simple substantive inference but is hard to reconcile with an opinion purported to create new law in the form of a novel rebuttable presumption. This negative inference is particularly strong in light of the Court’s articulate discussion of rebuttable presumptions, the rules of burden-shifting, and rebuttal procedure in other cases of the time.⁷²

Second, nothing in the opinion even *implies* the possible creation of a rebuttable presumption. The closest the Court comes is an ambiguous statement that “[t]here is nothing in the record of this case to rebut the inherently anticompetitive tendency manifested by [the market concentration evidence].”⁷³ Of course, the term “rebut” is often used in the lay sense of tending to disprove an adverse inference,⁷⁴ and this use of the term better fits the statement’s explicit reference to the inferred (inherent) tendency of undue concentration to lead to anticompetitive effects. Nor does the idea of a rebuttable presumption enter by incorporation. Other than *Brown Shoe*, the only other legal authority the Court cites in the structural presumption passage is a district court opinion: *United States v. Koppers Company*.⁷⁵ This case discusses the legislative intent of Section 7 at length, but contains no mention whatsoever of market concentration or rebuttable presumptions.

Third, the prospect that *Philadelphia National Bank* creates a novel burden-shifting presumption is inconsistent with the opinion’s self-description. The Court expressly denies that it does more than simply apply the test of illegality announced in *Brown Shoe*, stating that “we analyzed the test [of merger legality] in detail in [*Brown Shoe*], and that analysis need not be repeated or extended here, for the instant case presents only a straight-forward problem of application to particular facts.”⁷⁶ As noted above, *Brown Shoe* treats market concentration evidence as supporting an important substantive inference of the likely competitive consequences of a merger but does not contemplate a

70. *Id.* at 366 (emphasis added).

71. *Cf.* Paul R. Rice & Slade S. Cutter, *Problems with Presumptions: A Case Study of the “Structural Presumption” of Anticompetitiveness*, 47 ANTITRUST BULL. 557, 565–66 (2002) (arguing that *Philadelphia National Bank* articulates a per se rule as opposed to a rebuttable presumption).

72. *See, e.g.*, *Dick v. N.Y. Life Ins. Co.*, 359 U.S. 437, 443 (1959) (“Proof of coverage and of death by gunshot wound shifts the burden to the insurer to establish that the death of the insured was due to his suicide. Under [applicable state law], this presumption does not disappear once the insurer presents any evidence of suicide. Rather, the presumed fact (accidental death) continues, and a plaintiff is entitled to affirmative instructions to the jury concerning its existence and weight.”); *id.* at 443 n.4 (noting contemporaneous debates about the procedural implications of rebuttable presumptions and the effects of producing rebuttal evidence).

73. *United States v. Phila. Nat’l Bank*, 374 U.S. 321, 366 (1963).

74. *See, e.g.*, GARNER, *supra* note 43, at 286 (defining “disprove; refute; confute; rebut; controvert”); *cf. id.* at 754 (defining “rebuttable presumption”).

75. *United States v. Koppers Co.*, 202 F. Supp. 437 (W.D. Pa. 1962).

76. *Phila. Nat’l Bank*, 374 U.S. at 355.

burden-shifting presumption of illegality.⁷⁷ Similarly, the Court's description of the structural presumption as a way to "simplify the test of illegality" is reconcilable with general deference to the test of *Brown Shoe* and the need for Section 7 analysis to be "based upon a firm understanding of the structure of the relevant market"⁷⁸ only if understood as a permissible substantive inference.

Fourth, subsequent merger cases in the 1960s do not bear out the tacit creation of a rebuttable presumption in *Philadelphia National Bank*. For example, in the five merger cases to reference *Philadelphia National Bank* in the year following its announcement, the opinion is mainly cited for the possibility of dual regulation under the antitrust laws⁷⁹ and for language on the importance of curbing concentration in already heavily concentrated markets.⁸⁰ The closest the Court ever comes to the idea of a rebuttable presumption is an isolated statement in *United States v. Continental Can* to the effect that the combined share of the merging firms "approaches that held presumptively bad in [*Philadelphia National Bank*]."⁸¹ This and one other use of the word "presumption" in a footnote in one of Justice Harlan's many dissents,⁸² provide no serious basis for thinking that the structural presumption was treated as more than a substantive inference.

The same is true of other important merger cases of the 1960s. In *United States v. Von's Grocery*, for example, no mention is made of presumptions, rebuttals, or burden-shifting.⁸³ The opinion of the Court in *United States v. Pabst Brewing* is similarly devoid of any mention of rebuttable presumptions.⁸⁴ Both of these cases proscribed mergers of firms with tiny market shares by modern standards and few would endorse their conclusions today. But however objectionable their extreme hostility to increasing market concentration may now be,⁸⁵ there is nothing in the language or reasoning of even these now infamous cases to suggest that the holdings rested on more than a strong substantive inference of the likely anticompetitive effects of increased market concentration through merger.

To summarize, the structural presumption of *Philadelphia National Bank* is not a rebuttable burden-shifting presumption. Taken as a whole—the argument and language of the case, its purported objective, and its application in subsequent cases—all indications are that the structural presumption is a permissible substantive inference. To be specific, *Philadelphia National Bank* does not vary the import *Brown Shoe* assigns to the probative value of market concentration and other factors. Rather, it recognizes a

77. See *supra* notes 59–61 and accompanying text (describing how *Brown Shoe* characterized the role of market concentration evidence in competitive effects analysis).

78. *Phila. Nat'l Bank*, 374 U.S. at 362.

79. *United States v. El Paso Natural Gas Co.*, 376 U.S. 651 (1964); *United States v. First Nat'l Bank & Tr. Co. of Lexington*, 376 U.S. 665 (1964).

80. *United States v. Aluminum Co. of Am.*, 377 U.S. 271 (1964); *United States v. Penn-Olin Chem. Co.*, 378 U.S. 158 (1964).

81. *United States v. Cont'l Can Co.*, 378 U.S. 441, 461 (1964).

82. *First Nat'l Bank and Trust*, 376 U.S. at 676 n.6 (Harlan, J., dissenting) (referencing without elaboration "the 'presumption' that the Court laid down in *Philadelphia National Bank*").

83. *United States v. Von's Grocery Co.*, 384 U.S. 270 (1966).

84. *United States v. Pabst Brewing Co.*, 384 U.S. 546 (1966).

85. Cf. *Baker & Shapiro*, *supra* note 1, at 237 (noting the extremely low concentration figures proscribed in these cases and suggesting that modern economic thinking, though sensitive to the importance of market concentration evidence generally, would not support the apparent reasoning of these cases).

permissible inference of illegality where market concentration evidence is so overwhelming that it obviates the need for the plaintiff to produce further proof of the likely anticompetitive effects of a merger.

B. The 1970s (General Dynamics)

Supreme Court cases in the 1970s changed the language of the structural presumption by describing proof of undue concentration as a prima facie showing. For example, in *United States v. Citizens and Southern National Bank*, the Court commented that by providing evidence of undue concentration, “the Government plainly made out a prima facie case of a violation of [Section] 7.”⁸⁶ The leading case for this use of prima facie language in discussion of the structural presumption is *United States v. General Dynamics*.⁸⁷

But despite the change in language it precipitated, *General Dynamics* does not appear to vary the substance of the structural presumption as articulated in *Philadelphia National Bank*. *General Dynamics* describes cases of the 1960s as having found “prima facie violations of [Section] 7 of the Clayton Act from aggregate [market concentration] statistics,”⁸⁸ the effect of which is “to allow the Government to rest its case on a showing of [undue concentration].”⁸⁹ The meaning of prima facie language is ambiguous, and this description is technically consistent with both a substantive inference sufficient to sustain the plaintiff’s burden of production and a rebuttable presumption that causes a legal shift in the burden of production.

Taken as a whole, however, any ambiguity in *General Dynamics* resolves in favor of continuing the substantive inference interpretation of *Philadelphia National Bank*. Both the majority opinion and the dissent are devoid of any mention of presumptions, burden-shifting, or rebuttals. In other 1970s cases, the Court expressly discussed rebuttable presumptions unrelated to mergers alongside applications of *Philadelphia National Bank* and *General Dynamics*—drawing no connection between the former and the latter.⁹⁰ And as far as subsequent citation reveals, *General Dynamics* stands for the unremarkable proposition that the inference of anticompetitive effects from market concentration evidence may be defeated by evidence showing that the plaintiff’s proffered concentration statistics inaccurately reflect competitive realities of the market.⁹¹ Hardly a change from *Philadelphia National Bank*, this concern with the probative economic value of market concentration evidence is part-and-parcel of the substantive economic inference at the core of the *Philadelphia National Bank* structural presumption.

Nor does the use of prima facie language in other 1970s opinions provide any

86. *United States v. Citizens & S. Nat’l Bank*, 422 U.S. 86, 120 (1975).

87. *United States v. Gen. Dynamics Corp.*, 415 U.S. 486 (1974).

88. *Id.* at 496.

89. *Id.* at 497.

90. *See Citizens & S. Nat’l Bank*, 422 U.S. at 139. In a dissenting opinion, Justice Brennan references the appellee’s inability to “rebut the Government’s prima facie case” as grounds for remand. *Id.* at 148 (Brennan, J., dissenting). If anything, this language may be more consistent with a substantive inference than a rebuttable presumption.

91. *Cf. Baker & Shapiro*, *supra* note 1, at 238 (noting that “*General Dynamics* was not thought to have signaled a change of course” or to have laid new rules of general applicability for the conduct of merger analysis).

evidence of intent to change the substance of the structural presumption. Even in the limited context of merger cases, the 1970s Court was liberal in its application of prima facie labels to a range of ostensibly unrelated topics. In a single case, uses ranged from stating that “mere entry by acquisition would not prima facie establish a firm’s status as an actual potential entrant,”⁹² to asserting that a certain quantum of evidence “certainly reaches the prima facie stage,”⁹³ to explaining how the plaintiff might “make out a prima facie case.”⁹⁴

No Supreme Court opinion in the 1970s—or thereafter—ever described the structural presumption in the express language of rebuttable presumptions.⁹⁵ The closest the Court came was in the 1974 case *United States v. Marine Bancorporation*.⁹⁶ In the context of commenting on the defendant’s obligation to negate the implication of market concentration evidence, the Court explained:

[B]y introducing evidence of concentration ratios of [significant] magnitude . . . the Government established a *prima facie* case [of likely anticompetitive effects]. On this aspect of the case, the burden was then upon appellees to show that the concentration ratios, which can be unreliable indicators of actual market behavior, did not accurately depict the economic characteristics of the [market].⁹⁷

Again, this language is at most ambiguous. While consistent with a rebuttable presumption framework, it is also entirely consistent with the procedural effect of the plaintiff satisfying the burden of production by proving that the merger would lead to undue concentration. Without any specific indication that it was treating the structural presumption as something other than a substantive inference, *Marine Bancorporation* does not suggest a change of course for the Court.

C. The 1980s and 1990s (Baker Hughes)

By the late 1970s, the Supreme Court had effectively abandoned the subject of horizontal mergers, and by the early 1980s, lower courts were already providing their own interpretive garnishments on the structural presumption. Several opinions described *Philadelphia National Bank* as holding that mergers leading to undue concentration were

92. *United States v. Falstaff Brewing Corp.*, 410 U.S. 526, 561 (1973).

93. *Id.* at 565.

94. *Id.* at 566.

95. Outside of Court opinions, the term “rebuttable presumption” was once used in a nonbinding concurrence-and-dissent by Justice Harlan. On one hand, Justice Harlan refers to market concentration evidence as creating a “rebuttable presumption.” *United States v. Phillipsburg Nat’l Bank & Tr. Co.*, 399 U.S. 350, 377 (1970) (Harlan, J., concurring in part and dissenting in part) (quotation marks and internal citations omitted). On the other hand, he asserts in the same paragraph that “[*Philadelphia National Bank*] did not hold that all bank mergers resulting [in undue concentration], necessarily violated § 7 of the Clayton Act. Instead that case established a rule by which the percentage figures alone do no more than ‘raise an inference,’ that the merger will significantly lessen competition.” *Id.* These irreconcilable assertions do not provide great confidence that Harlan meant to describe a formal legal presumption, and diligence has revealed no case that has ever cited these remarks as support for the rebuttable presumption interpretation of the structural presumption.

96. *United States v. Marine Bancorporation, Inc.*, 418 U.S. 602 (1974).

97. *Id.* at 631 (internal citations omitted).

“presumptively illegal.”⁹⁸ Others took the proposition further, declaring that *Philadelphia National Bank* stood for the illegality of mergers when the defendant “did not rebut the presumption of illegality raised by [market] concentration statistics.”⁹⁹

But the clearest and most influential articulation of the rebuttable presumption interpretation of the structural presumption came from the D.C. Circuit in its 1990 disposition of *United States v. Baker Hughes*.¹⁰⁰ Providing what is now black-letter law on the role of market concentration evidence in horizontal merger analysis, *Baker Hughes* describes what it characterized as the then “familiar” structure of horizontal merger litigation as follows.¹⁰¹

First, “[b]y showing that a transaction will lead to undue concentration in the market for a particular product in a particular geographic area, the [plaintiff] establishes a presumption that the transaction will substantially lessen competition.”¹⁰² Second, “[t]he burden of producing evidence to rebut this presumption then shifts to the defendant.”¹⁰³ The defendant can rebut the presumption by “showing why a given transaction is unlikely to substantially lessen competition, or by discrediting the data underlying the initial presumption,” subject to the qualification that “[t]he more compelling the *prima facie* case, the more evidence the defendant must present to rebut it successfully.”¹⁰⁴ Third, “[i]f the defendant successfully rebuts the presumption, the burden of producing additional evidence of anticompetitive effect shifts to the [plaintiff], and merges with the ultimate burden of persuasion, which remains with the [plaintiff] at all times.”¹⁰⁵

Far from familiar, the opinion’s interpretation of market concentration evidenced as activating a rebuttable three-part burden-shifting presumption is essentially novel law. As no Supreme Court case has ever articulated a rebuttable presumption interpretation of the structural presumption, the sole authority the opinion cites in favor of this interpretation is a Seventh Circuit case: *Kaiser Aluminum & Chemical Corporation v. F.T.C.*¹⁰⁶ Discussion of the structural presumption in *Kaiser Aluminum* contains a mix of language on presumptions, burdens, and rebuttals,¹⁰⁷ as well as statements more indicative of

98. See, e.g., *United States v. Waste Mgmt., Inc.*, 743 F.2d 976, 981 (2d Cir. 1984) (referring to “the *Philadelphia National Bank* presumption” for the proposition that “a merger resulting in a large market share is presumptively illegal”); *United States v. Calmar Inc.*, 612 F. Supp. 1298, 1301 (D.N.J. 1985) (“In [*Philadelphia National Bank*] the Court concluded that a merger . . . was presumptively illegal.”); *United States v. Ivaco, Inc.*, 704 F. Supp. 1409, 1418–19 (W.D. Mich. 1989). (“In [*Philadelphia National Bank*] the Court held that a merger . . . was presumptively illegal Subsequent cases have followed [this] presumptive illegality approach . . .”).

99. *Kaiser Aluminum & Chem. Corp. v. F.T.C.*, 652 F.2d 1324, 1334 (7th Cir. 1981).

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

101. *Id.* at 982.

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

103. *Baker Hughes*, 908 F.2d at 982–83 (citing *United States v. Marine Bancorporation*, 418 U.S. 602, 631 (1974); *United States v. Gen. Dynamics*, 415 U.S. 486, 496–504 (1974); *Phila. Nat’l Bank*, 374 U.S. at 363).

104. *Baker Hughes*, 908 F.2d at 991; see also *id.* at 989 (citing *United States v. Aluminum Co. of Am.*, 377 U.S. 271, 280 (1964), for the proposition that the less concentrated a market is, the more competitive it is presumed to be).

105. *Baker Hughes*, 908 F.2d at 983 (citing *Kaiser Aluminum & Chem. Corp. v. F.T.C.*, 652 F.2d 1324, 1340, 1340 n.12 (7th Cir. 1981)).

106. *Kaiser Aluminum*, 652 F.2d at 1324.

107. E.g., *id.* at 1340 (“*General Dynamics* requires the defendant to come forward with evidence to rebut the government’s *prima facie* case of substantial lessening of competition through [market concentration

substantive inferences than formal burden-shifting presumptions.¹⁰⁸ As authority for a three-part burden-shifting interpretation of the structural presumption, *Baker Hughes* cites one isolated footnote in *Kaiser Aluminum*, which offhandedly analogizes disapproval of the economic relevance of market concentration evidence with the burden to disprove discrimination in Title VII litigation.¹⁰⁹

The *Baker Hughes* framework has been widely adopted despite its lack of supporting authority. The framework has been continued by the D.C. Circuit,¹¹⁰ adopted by other circuits,¹¹¹ and picked up by many district courts.¹¹² Though not always rigidly applied,¹¹³ the framework has not been expressly varied since it was laid down.

In summation, the modern rebuttable presumption interpretation of the structural presumption in horizontal merger analysis is novel law, unsupported by decades of controlling Supreme Court authority. As the following Parts show, the rebuttable presumption interpretation is also an unpersuasive and undesirable characterization of the structural presumption. Part IV argues that the substantive inference interpretation better fits the economic relevance of market concentration evidence in merger analysis. Part V argues that the substantive inference interpretation is the better choice for promoting sound procedure and accurate competitive effects analysis.

IV. POSITIVE ANALYSIS

As the previous Part argues, Supreme Court case law on the structural presumption in horizontal merger analysis articulates a substantive (economic) inference of the likely competitive consequences of a merger. The strength of this inference has varied over time, adjusting to changes in economic thinking on the relationship between market structure and firm conduct. But the basic principle of the structural presumption has consistently been that of a substantive inference drawn from economic theory.¹¹⁴

In *Baker Hughes*, the D.C. Circuit took the structural presumption a different

evidence].”)

108. *E.g.*, *id.* at 1341 (describing the procedural rule for a substantive inference, not a rebuttable presumption, in declaring that “nonstatistical evidence of relevant economic factors must be weighed by the trier of fact in arriving at a conclusion as to whether the effect of an acquisition may be substantially to lessen competition”).

109. *Id.* at 1340 n.12 (“We do not view this as indicating that the burden of persuasion shifts from the government but only that a burden of going forward with the evidence shifts. A parallel situation is found in the shifting of the burden of introducing evidence in discrimination cases.”) (citing Title VII case law).

110. *E.g.*, *F.T.C. v. CCC Holdings Inc.*, 605 F. Supp. 2d 26, 36–37 (D.C. Cir. 2009) (applying the *Baker Hughes* framework).

111. *E.g.*, *F.T.C. v. Univ. Health, Inc.*, 938 F.2d 1206, 1218–19 (11th Cir. 1991) (adopting the *Baker Hughes* framework); *Chi. Bridge & Iron Co. N.V. v. F.T.C.*, 534 F.3d 410, 423 (5th Cir. 2008); *cf.* *Olin Corp. v. F.T.C.*, 986 F.2d 1295, 1305 (9th Cir. 1993) (distinguishing the result from *Baker Hughes* within the framework).

112. *E.g.*, *United States v. Oracle Corp.*, 331 F. Supp 2d 1098, 1110 (N.D. Cal. 2004) (adopting the *Baker Hughes* framework); *United States v. Bazaarvoice, Inc.*, No. 13-CV-100133-WHO, 2014 WL 203966, at *64 (N.D. Cal. Jan. 8, 2014).

113. *See infra* Part IV.C (discussing the actual order of evidence in merger litigation).

114. *Cf.* Daniel L. Rubinfeld, *On the Foundations of Antitrust Law and Economics*, in *HOW THE CHICAGO SCHOOL OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST* 51, 53 (Robert Pitofsky ed., 2008) (commenting that developments in industrial organization economics generally permeate antitrust law after a lag of a decade or more).

direction. Its novel approach placed market concentration evidence in the role of the basic fact in a burden-shifting framework designed to mirror the presentation of evidence in Title VII disparate treatment litigation.¹¹⁵ Comparing the *Baker Hughes* structural presumption with the rebuttable presumption framework of *McDonnell Douglas Corporation v. Green* reveals an almost perfect parity of approach.¹¹⁶

In Title VII disparate treatment cases where the plaintiff lacks direct evidence of discrimination,¹¹⁷ the order and allocation of proof follows a three-part burden-shifting structure.¹¹⁸ First, the plaintiff carries the burden of making out a prima facie case of discrimination by introducing basic facts showing that an act of discrimination might have occurred.¹¹⁹ Second, the burden shifts to the defendant “to articulate some legitimate, nondiscriminatory reason for the employee’s rejection.”¹²⁰ The burden in this stage is one of production: the defendant must proffer a justification “which, if believed by the trier of fact, would support a finding that unlawful discrimination was not the cause of the adverse employment action.”¹²¹ Third, if rebuttal evidence is proffered, the plaintiff must be afforded a “fair opportunity”¹²² to show by a preponderance of the evidence¹²³ that the defendant’s nondiscriminatory justification is pretext. The plaintiff may, for example, discredit the plausibility, credibility, or consistency of the proffered justification.¹²⁴ In this burden-shifting structure, the ultimate burden of persuasion remains at all times with the plaintiff.¹²⁵

In retrospect, it is not surprising that *Baker Hughes* would attempt to equate the structural presumption with the presentation of evidence in disparate treatment cases. The *McDonnell Douglas* burden-shifting framework is familiar to judges and does at least superficially appear to offer a helpful structure for navigating the litigation of a complex factual determination. But while the analogy may have been well intentioned, it fails as positive description of law.

Comparing the different roles of evidence in Title VII and merger litigation, the remainder of this Part demonstrates several flaws in the *Baker Hughes* interpretation of the structural presumption. The rebuttable presumption interpretation ignores the intrinsic probative value of market concentration evidence, inaccurately reflects evidentiary procedure for rebuttal presumptions, and inadequately describes the order and presentation of evidence in modern horizontal merger litigation. In each instance, an

115. In relevant part, Title VII makes it illegal for an employer to refuse to hire, to fire, or “otherwise to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual’s race, color, religion, sex, or national origin.” 42 U.S.C. § 2000e-2(a)(1) (1991).

116. *McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 802, 807 (1973).

117. For context and comparison to cases where direct or statistical evidence of discrimination is available, see GEORGE RUTHERGLEN, *MAJOR ISSUES IN THE FEDERAL LAW OF EMPLOYMENT DISCRIMINATION* 9–32 (5th ed. 2012).

118. *McDonnell Douglas*, 411 U.S. at 802.

119. *Id.*

120. *Id.*

121. See Tracy Bateman Farrell et al., 21A FEDERAL PROCEDURE, LAWYERS EDITION § 50:949 (citing *Sykes v. Mt. Sinai Medical Ctr.*, 967 F. Supp. 791, 795 (S.D.N.Y. 1997)).

122. *McDonnell Douglas*, 411 U.S. at 804.

123. *Tex. Dep’t Cmty. Affairs v. Burdine*, 450 U.S. 248, 253 (1981).

124. Farrell et al., *supra* note 121.

125. *Burdine*, 450 U.S. at 253–54.

accurate statement of evidence law and economic theory can be achieved by simply interpreting the structural presumption as a substantive inference.

A. The Probative Value of Market Concentration

In contrast to the basic facts adduced in a disparate treatment context, market concentration evidence has independent probative value as an indicator of the likely competitive consequences of a merger. This substantive inference strains the three-part burden-shifting framework designed to accommodate basic facts of little intrinsic probative value. To see how market concentration evidence fails to fit the rebuttable presumption framework, it suffices to compare the function of the basic facts in a Title VII disparate treatment suit with the proper function of market concentration evidence in Section 7 litigation.

At least in theory, a plaintiff can escape the sometimes insuperable difficulty of directly proving discrimination in a Title VII case by falling back on the *McDonnell Douglas* rebuttable presumption framework.¹²⁶ For example, to make out a prima facie case of disparate treatment in hiring, a plaintiff could produce the following basic facts: (1) “the plaintiff belonged to a racial minority,” (2) the plaintiff applied for an available position, (3) the application was rejected, and (4) after this rejection, the defendant continued to seek someone with the plaintiff’s qualifications.¹²⁷ This set of basic facts arguably supports an inference that discrimination is possible, but does not independently tend to prove the likelihood of discrimination. Put another way, these facts support a threshold inference that discrimination might have occurred, but do not provide a basis for inferring the degree or intensity of discrimination—that it was more likely, more extreme, or more harmful in one case than any other meeting these conditions.

The framework of the *McDonnell Douglas* rebuttable presumption is keyed to the weak probative value of these basic facts. To assist the plaintiff in this type of case, the presumption provides artificial weight to the basic facts by requiring the defendant to come forward with a justification for the embattled acts and not simply move for directed verdict at the close of the plaintiff’s case in chief.¹²⁸ If the conduct in question was truly bald discrimination, it may be difficult for the defendant to mount a plausible justification. But precisely because the basic facts have little independent probative value,¹²⁹ the defendant’s responsive burden is comparably light. If the defendant sustains the burden of production with a *plausible* nondiscriminatory justification, the

126. See Ann C. McGinley, *Credulous Courts and the Tortured Trilogy: The Improper Use of Summary Judgment in Title VII and ADEA Cases*, 34 B.C. L. REV. 203, 212 (1993) (“[P]laintiffs can prove their case by direct or circumstantial evidence or both. Where direct evidence is lacking, the courts employ a burden-shifting approach first recognized in [*McDonnell Douglas*].”).

127. Denny Chin & Jodi Golinsky, *Moving Beyond McDonnell Douglas: A Simplified Method for Assessing Evidence in Discrimination Cases*, 64 BROOK. L. REV. 659, 662 (1998); see McGinley, *supra* note 126, at 214–21 (discussing what a plaintiff must show to establish a presumption in this setting).

128. See *Trans World Airlines, Inc. v. Thurston*, 469 U.S. 111, 121 (1985) (“The shifting burdens of proof set forth in *McDonnell Douglas* are designed to assure that the ‘plaintiff [has] his day in court despite the unavailability of direct evidence.’”) (alteration and square brackets in original).

129. Cf. WRIGHT ET AL., *supra* note 9, at n.78 (noting that evidence with this character is the archetypal context for a *Thayer-Wigmore* style presumption).

presumption of discrimination bursts, disappearing entirely from the case.¹³⁰ Lacking evidence of direct probative value, the plaintiff may salvage the case at this point only by showing that the defendant's justification is pretext, thus reviving the presumption. The plaintiff may do this, for example, by attacking the credibility of the defendant's justification on cross examination.¹³¹

Compared to the basic facts in the *McDonnell Douglas* framework, market concentration evidence is not well suited to the role of a basic fact in a burden-shifting rebuttable presumption. Like the basic facts adduced in a disparate treatment case, evidence of undue concentration does support a minimal threshold inference of the possible anticompetitive effects of a merger. Market power is generally hard to establish in unconcentrated markets but may well be exercised under the condition of sufficient market concentration.¹³²

But unlike the basic facts in the disparate treatment context, market concentration evidence also supports inferences about the degree or intensity of harm: the potential anticompetitive harm of a merger increases with the extent of market concentration involved. In the absence of credible and sufficient entry, merger-specific efficiencies, or other offsetting factors, economic thinking holds that higher market concentration leads to a greater likelihood of more severe anticompetitive effects under a wide range of models and assumptions.¹³³ This relationship holds as a circumstantial inference, as well as in relation to various specific theories of competitive effects. All else equal, higher concentration raises both the likelihood and severity of many forms of unilateral and coordinated harm arising from a merger.¹³⁴ To summarize, market concentration is independently probative of the anticompetitive consequences of a merger, and its probative value grows more-than-linearly with increases in concentration.¹³⁵

Because of this independent probative value, market concentration evidence poorly fits the burden-shifting framework of a formal rebuttable presumption. First, and especially in light of the modern enforcement practice of only challenging mergers implicating significant market concentration,¹³⁶ the independent inference supported by market concentration evidence does not require the assistance of artificial burden-

130. See *supra* notes 47–48, 51–53 and accompanying text (noting that a defendant's burden of production is satisfied with relatively little evidence).

131. *McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 804–05 (1973).

132. There is, of course, room for disagreement about how much market concentration is needed to support even a threshold inference. See TIROLE, *supra* note 14, §§ 5.1–5.2 (discussing the *Bertrand Paradox* of competitive behavior with a small number of firms in an oligopolistic setting); see also Paul Klemperer, *Bidding Markets*, 3 J. COMPETITION L. & ECON. 1, 4–5 (2005) (discussing related questions in a bidding market context).

133. See *supra* note 18 (noting that sufficient market concentration is probative of likely competitive harm in many situations); see also *supra* note 15 (discussing context circa the 1960s).

134. See *supra* notes 18, 21 (citing specific vectors of competitive harm); see generally U.S. DEP'T OF JUST. & FED. TRADE COMM'N., HORIZONTAL MERGER GUIDELINES §§ 6–7 (Aug. 19, 2010), <https://www.justice.gov/sites/default/files/atr/legacy/2010/08/19/hmg-2010.pdf> (defining unilateral and coordinated effects).

135. Cf. *F.T.C. v. Univ. Health, Inc.*, 938 F.2d 1206, 1220 (11th Cir. 1991) (explaining that because “the FTC established a strong prima facie case that the proposed acquisition would substantially lessen competition,” the defendant would need to adduce evidence sufficient to overcome a “strong presumption of illegality”).

136. See, e.g., HORIZONTAL MERGER GUIDELINES, *supra* note 134, § 5.3 (suggesting the U.S. antitrust enforcement agencies will typically only challenge mergers implicating a high degree of market concentration).

shifting. Unlike the basic facts adduced in a disparate treatment suit, evidence of undue concentration supports an independent inference of the likely anticompetitive effects of a merger. This is simply the substantive inference interpretation of the structural presumption as articulated in *Philadelphia National Bank*. Indeed, to the extent that *Baker Hughes* requires *undue* concentration to activate its rebuttable presumption,¹³⁷ it only purports to artificially shift the burden of production to the defendant when market concentration evidence is already strong enough to compel the same effect on probative value alone under *Philadelphia National Bank*.¹³⁸

Second, the basic fact of undue concentration does not cease to support an inference of likely anticompetitive effects when the defendant comes forward to rebut the presumed fact. As a doctrinal matter, the production of evidence rebutting the inference of anticompetitive effects does destroy any *legal* presumption to that effect.¹³⁹ But even after a presumption is rebutted, the fact-finder is always justified in drawing any inference which evidence of the basic fact would logically support on an independent basis.¹⁴⁰ The defendant's easy satisfaction of its burden of production with an efficiencies argument or some other minimal rebuttal of the presumed fact just sufficient to "burst the bubble" thus has the practical effect of negating the presumption of illegality essentially as a matter of course.¹⁴¹ But because evidence of undue concentration remains independently probative of likely anticompetitive effects, the end result of this easy rebuttal is simply to collapse the *Baker Hughes* rebuttable presumption into the substantive inference articulated in *Philadelphia National Bank*.

Third, the substantive relevance of market concentration evidence strains the *McDonnell Douglas* framework designed to fit basic facts not themselves probative of the degree or intensity of harm. Under the bubble bursting theory of presumptions and its variants, a rebuttable presumption is treated as "deserving of no greater effect than a requirement of minimal rebuttal."¹⁴² This treatment is justified for basic facts of merely threshold relevance, but is ill-suited to basic facts of independent probative value in demonstrating the intensity or degree of harm. As discussed previously, market concentration evidence falls within this latter category.

137. See *supra* note 102 and accompanying text (describing the first step in the *Baker Hughes* framework).

138. See *supra* notes 67–68 and accompanying text (describing the use of market concentration evidence as intrinsically probative of potential competitive consequences in *Philadelphia National Bank*).

139. See *supra* notes 47–48, 51–53 and accompanying text (noting that sustaining the burden of production on rebuttal destroys the legal presumption); see also *Pennzoil Co. v. Fed. Energy Regulatory Comm'n*, 789 F.2d 1128, 1136–37 (5th Cir. 1986) ("If the party against whom the presumption operates produces evidence challenging the presumed fact, the presumption simply disappears from the case.").

140. See *supra* note 53 and accompanying text (noting this proposition in Rule 301); WRIGHT ET AL., *supra* note 9 ("Thayer-Wigmore presumptions were not all that flimsy . . . if the presumption had a logical core the underlying inference remained to allow the proponent of the presumption to get to the jury over her opponent's motion for a directed verdict."); *Pennzoil*, 789 F.2d at 1137 ("The [basic] fact . . . is not negated by the rebuttal evidence. It does not follow that the evidentiary basis underlying the presumption is negated merely because [evidence is submitted] sufficient to rebut the presumption. Granted, the presumption is dispelled, but the underlying evidence remains in the case. A fact finder could still credit the [basic fact], which is probative of [the presumed fact], over the [rebuttal] evidence because the [rebuttal] evidence is simply evidence from which a reasonable person could, but is not required to, infer that [the presumed fact] does not exist.").

141. Cf. *Baker & Shapiro*, *supra* note 1, at 3 (discussing ease of entry, procompetitive efficiencies, and other rebuttal arguments merging parties "love to make").

142. Lewis, *supra* note 48, at 11.

The *Baker Hughes* framework attempts to escape this problem with language about the defendant's burden of production on rebuttal being a variable requirement that rises in proportion to the strength of the plaintiff's prima facie case.¹⁴³ The exact comparison this standard requires is unclear and lower courts have not established any settled application of the concept.¹⁴⁴ But the inescapable prediction is that courts will, in practice, attempt to directly compare the probative value of the market concentration evidence with any proffered rebuttal evidence.¹⁴⁵ And this, again, merely converts the meaning and procedure of the structural presumption back into the substantive economic inference described in *Philadelphia National Bank*.

Other aspects of the *Baker Hughes* framework do not collapse easily into the substantive inference interpretation where appropriate treatment of the relevance of market concentration evidence requires it. For example, upon the production of sufficient rebuttal evidence, the third step in the *Baker Hughes* framework requires the plaintiff to come forward with "additional evidence showing a probability of substantially lessened competition."¹⁴⁶ If rebuttal of market concentration evidence requires anything less than a dispositive finding of fact against the probative value of this evidence, then as a description of evidence law and economic theory, this statement is simply false.

Evidence of undue concentration is independently probative of the likely competitive effects of a merger,¹⁴⁷ and this substantive inference may be drawn despite the production of rebuttal evidence by the defendant.¹⁴⁸ That is, even if the defendant produces rebuttal evidence, the plaintiff could, in principle, still prevail on the probative value of evidence of undue concentration alone and need not always adduce additional evidence to satisfy its burden of persuasion in this context. In this regard, the *Baker Hughes* framework differs from the substantive inference interpretation of the structural presumption, but only the latter provides an accurate statement of law.

B. The Form and Procedure of Rebuttal

Assuming for sake of argument that the structural presumption was a formal

143. *United States v. Baker Hughes Inc.*, 908 F.2d 981, 991 (D.C. Cir. 1990) ("The more compelling the prima facie case, the more evidence the defendant must present to rebut it successfully."); accord *Chi. Bridge & Iron Co. N.V. v. FTC*, 534 F.3d 410, 426 (5th Cir. 2008) (explaining that a strong prima facie case raises the defendant's "burden of production" on rebuttal). This contrasts with the typical standard for rebuttable presumptions, which requires that "the evidence introduced in rebuttal is sufficient to [but need not necessarily] support a finding contrary to the presumed fact." MCCORMICK ON EVIDENCE, *supra* note 29, § 344, at 692–93.

144. *E.g.*, *F.T.C. v. CCC Holdings Inc.*, 605 F. Supp. 2d 26, 46 (D.D.C. 2009) ("The courts have not established a clear standard that the merging parties must meet in order to rebut a *prima facie* case [in the *Baker Hughes* framework]. . .").

145. *E.g.*, *United States v. H & R Block, Inc.*, 833 F. Supp. 2d 36, 50 (D.D.C. 2011) (describing the *Baker Hughes* framework but summarizing the inquiry as "a totality-of-the-circumstances approach . . . weighing a variety of factors to determine the effects of particular transactions on competition") (quoting *Baker Hughes*, 908 F.2d at 984).

146. *Baker Hughes*, 908 F.2d at 983 (emphasis added); see *id.* ("The government did not produce any additional evidence showing a probability of substantially lessened competition, and thus failed to carry its ultimate burden of persuasion.") (emphasis added).

147. See *supra* notes 18, 21 and accompanying text (describing economic theories of the relationship between market concentration and competitive harm).

148. See *supra* note 140 (describing the logical inference of potential competitive harm from market concentration evidence).

rebuttable presumption, a distinction would need to be drawn between the various ways a defendant could attempt to rebut this presumption. Description of the burden-shifting framework in *Baker Hughes* omits this detail and thus presents an oversimplified description of rebuttal procedure in many instances. The problem is that rebuttal of a basic fact has different procedural effects from rebuttal of a presumed fact in the rebuttable presumption framework.

The first form of rebuttal—evidence disproving the basic fact in a rebuttable presumption—does not generally compel a shift of the burden of production back to the plaintiff. For example, the defendant in Section 7 litigation may seek to undermine the plaintiff's market concentration evidence by showing that market share statistics constitute an inaccurate reflection of competitive realities. As noted previously, this is not truly a rebuttal of the presumption at all but simply makes out a fact question on the existence of the basic fact.¹⁴⁹

The second form of rebuttal—evidence disproving the presumed fact in a rebuttable presumption—does procedurally shift the burden of production back to the plaintiff. For example, the defendant may admit that the merger will lead to undue concentration, but may argue that merger-specific efficiencies are sufficient to counteract the anticompetitive potential of the merger. The production of evidence contrary to the presumed fact constitutes rebuttal of the presumption and bursts the presumption, if sufficient to at least sustain the burden of production on this issue.¹⁵⁰

The *Baker Hughes* framework expressly contemplates both of these methods of rebuttal,¹⁵¹ but does not distinguish between the different effects each has on the status of the presumed fact and resulting case procedure.¹⁵² This omission masks practical difficulties in the framework and renders *Baker Hughes* flawed as a positive statement of law. Some examples serve to illustrate the underlying problem.

Because the idea of undue concentration is less concrete than the basic facts in a disparate treatment case, classifying rebuttal evidence as relating to the basic or presumed facts in the *Baker Hughes* framework is not trivial. Starting from the economic inference behind the use of market concentration evidence in *Brown Shoe* and *Philadelphia National Bank*,¹⁵³ the market concentration chain-of-inference might be summarized as follows: (1) market concentration evidence approximates the idea of market concentration in economic theory, (2) in economic theory, a merger resulting in high market concentration tends to increase the market power of some firms, and (3) the potential exercise of increased market power suggests that the effects of a merger may be substantially to lessen competition.¹⁵⁴

149. See *supra* note 45 and accompanying text (explaining the procedural consequence of this showing).

150. See MUELLER & KIRKPATRICK, *supra* note 41, § 3:9; see also *supra* notes 46–53 and accompanying text (discussing the various possible procedural interpretations of this showing).

151. *United States v. Baker Hughes*, 908 F.2d 981, 991 (D.C. Cir. 1990) (“A defendant can make the required showing by affirmatively showing why a given transaction is unlikely to substantially lessen competition, or by discrediting the data underlying the initial presumption in the government’s favor.”); see *id.* at 985–86 (listing a variety of other factors that could support a rebuttal argument).

152. *Id.* at 983 (stating that upon the production of either form of rebuttal evidence, “the burden of producing additional evidence of anticompetitive effect shifts to the government”).

153. See *supra* notes 58–70 and accompanying text (describing *Brown Shoe*’s and *Philadelphia National Bank*’s use of market concentration evidence).

154. See HORIZONTAL MERGER GUIDELINES, *supra* note 134, § 4, ¶ 1 (“The measurement of market shares

Evidence tending to contradict the first step in the market concentration chain-of-inference may be categorized as going to the basic fact in the *Baker Hughes* framework. So evidence showing that market concentration figures are imprecise or inaccurately reflect the competitive reality of the market, for example, should probably be classified as rebutting the basic fact of undue concentration.¹⁵⁵ Such a rebuttal would create a fact question on the basic fact but would not suffice to activate the third shift of the burden of production,¹⁵⁶ as *Baker Hughes* suggests it would.

Evidence tending to contradict the third step in the market concentration chain-of-inference may be characterized as going to the presumed fact of likely anticompetitive harm. For example, evidence that a merger will have large merger-specific efficiencies likely to be passed on to consumers should probably be classified as rebutting the presumed fact in the *Baker Hughes* presumption.¹⁵⁷ This rebuttal *would* destroy the presumption of illegality, but it would still not necessarily compel the third shift of the burden of production for the reasons discussed previously.¹⁵⁸

Evidence tending to contradict the second step in the market concentration chain-of-inference is difficult to classify. For example, evidence of credible entry by other market participants may show that market concentration does not accurately reflect market power (undermining the second inference).¹⁵⁹ Or it may also show that market shares inaccurately reflect the true structure of the market (undermining the first inference).¹⁶⁰ Or it may show that the exercise of market power would lead to offsetting entry and thus no lessening of competition (undermining the third inference).¹⁶¹ This is distressing because it means that soft distinctions in the classification of rebuttal arguments could have sharp procedural consequences in litigation.

Fortunately, the complication may be of limited importance in practice. As already noted, the fact-finder may always draw whatever logical inference is supported by the basic fact in a rebuttable presumption framework. And in practical consequence, inaccuracies and difficulties in the *Baker Hughes* framework seem likely to result in the probative value of market concentration evidence being directly compared with the probative value of rebuttal evidence. But this, again, merely restates the substantive

and market concentration is not an end in itself, but is useful to the extent it illuminates the merger's likely competitive effects.").

155. Cf. LAWRENCE ANTHONY SULLIVAN, HANDBOOK OF THE LAW OF ANTITRUST § 204, at 622–25 (1977) (discussing examples of this type of argument).

156. See *Rice & Cutter*, *supra* note 71, at 566 (making a similar point in connection with the analysis of market concentration in *General Dynamics*).

157. Cf. *F.T.C. v. Univ. Health, Inc.*, 938 F.2d 1206, 1223 (11th Cir. 1991) (discussing examples of this type of argument); *F.T.C. v. H.J. Heinz Co.*, 246 F.3d 708, 720 (D.C. Cir. 2001).

158. See *supra* notes 139–140 and accompanying text (noting that market concentration evidence retains its substantive probative value regardless of the status of any legal presumption attributed to it, and may suffice to satisfy the plaintiff's burden of persuasion regardless of the defendant's production of rebuttal evidence).

159. Cf. HORIZONTAL MERGER GUIDELINES, *supra* note 134, §§ 5.2–5.3, 9 (noting that where adequate entry is likely, market concentration evidence may not always reflect the maintenance of market power and its potential exercise).

160. Cf. *United States v. Gen. Dynamics Corp.*, 415 U.S. 486, 508 (1974) (discussing how concentration evidence may fail to reflect competitive reality).

161. *E.g.*, *United States v. Waste Mgmt., Inc.*, 743 F.2d 976, 983 (2d Cir. 1984) (“[W]e believe that entry into the relevant [market] by new firms or by existing firms . . . is so easy that any anti-competitive impact of the merger before us would be eliminated more quickly by such competition than by litigation.”).

inference approach to market concentration evidence under *Philadelphia National Bank*.¹⁶²

C. The Order of Horizontal Merger Litigation

Finally, in contrast to the intended ordering function of the *McDonnell Douglas* presumption in disparate treatment litigation, the *Baker Hughes* rebuttable presumption framework fails to describe the order in which evidence is presented and evaluated in Section 7 litigation.¹⁶³ This eliminates yet another justification for interpreting the structural presumption as a burden-shifting rebuttable presumption, and it provides yet another argument for interpreting the structural presumption as the simple substantive inference articulated in *Philadelphia National Bank*. A brief comparison of Title VII and Section 7 litigation demonstrates these points succinctly.

In a Title VII disparate treatment case in which direct evidence of discrimination is unavailable, the *McDonnell Douglas* rebuttable presumption serves two related functions. First, it structures the order in which evidence is presented at trial:¹⁶⁴ (1) the plaintiff makes out a prima facie showing of possible discrimination, (2) the defendant has a chance to rebut the prima facie showing by providing some justification for the plaintiff's treatment, and (3) the plaintiff is afforded a fair opportunity to rebut the defendant's justification by showing it to be pretext.¹⁶⁵ In theory, this order of evidence follows the typical presentation of evidence at trial: the plaintiff first presents evidence of a right to relief before resting, then the defendant presents evidence opposing the plaintiff's right to relief, but throughout the defendant's presentation the plaintiff has an opportunity to cross-examine any witness and to rebut any new facts placed in issue.¹⁶⁶

Second, the *McDonnell Douglas* structure describes the probative value of evidence in each step of the burden-shifting process. In the third step, for example, the plaintiff's case turns on the plaintiff's successful impeachment of the defendant's proffered justification. The basic facts making out the plaintiff's prima facie case (evidence from the first stage) are not in play in the third stage because their lack of independent probative value renders them irrelevant to the ultimate question at the third stage of analysis.¹⁶⁷

162. See, e.g., *Chi. Bridge & Iron Co. N.V. v. F.T.C.*, 534 F.3d 410, 424 (5th Cir. 2008) (noting that in practical applications of the *Baker Hughes* structure, "evidence is often considered all at once and the burdens are often analyzed together").

163. See *St. Mary's Honor Ctr. v. Hicks*, 509 U.S. 502, 514 (1993) (noting that it is proper for courts to "establish certain modes and orders of proof").

164. Cf. Sandra F. Sperino, *Flying Without A Statutory Basis: Why McDonnell Douglas Is Not Justified by Any Statutory Construction Methodology*, 43 HOUS. L. REV. 743, 755 (2006) (noting and critiquing justification of the *McDonnell Douglas* framework as "a procedural device" for "arranging the presentation of evidence" in "a sensible, orderly way" that comports with "common experience as it bears on the critical question of discrimination") (citations and internal quotation marks omitted).

165. See *supra* notes 117–125 and accompanying text (describing the order and structure of arguments in the *McDonnell Douglas* framework).

166. Cf. McGinley, *supra* note 126, at 220 ("The Court initially sculpted the *McDonnell Douglas/Burdine* approach with the trial setting in mind.").

167. Cf. Farrell et al., *supra* note 121 (explaining that the kind of evidence the plaintiff must adduce is that showing "such weaknesses, implausibilities, inconsistencies, incoherencies, or contradictions in the employer's proffered reasons such that a reasonable factfinder could rationally find them unworthy of credence").

But treating the structural presumption as a burden-shifting rebuttable presumption accommodates neither of these ordering functions of the *McDonnell Douglas* framework. First, the order *Baker Hughes* assigns to the presentation of evidence is wrong. Perhaps in an effort to more closely mirror the *McDonnell Douglas* framework, it frames the presentation of evidence as follows: (1) the plaintiff makes out its prima facie case with market concentration evidence, (2) the defendant rebuts the plaintiff's prima facie case by any of a variety of arguments, and (3) the plaintiff then rebuts the defendant's rebuttal by producing "additional evidence of anticompetitive effect[s]."¹⁶⁸ As the Eleventh Circuit has commented, *Baker Hughes* "conjures up images of a tennis match, where the government serves up its prima facie case, the defendant returns with evidence undermining the government's case, and then the government must respond to win the point."¹⁶⁹

This is not how horizontal merger litigation works. In the typical case, the antitrust plaintiff presents all its evidence at once in setting forth its case in chief, and the merging-party defendant responds by producing all its evidence at once before resting.¹⁷⁰ This inconsistency between the order of evidence described in *Baker Hughes* and the settled practice in Section 7 litigation negates any procedural ordering served by the rebuttable presumption framework. As a matter of practice, *Baker Hughes* neither establishes nor reflects the actual order of proof in Section 7 cases.

Second, in contrast to the *McDonnell Douglas* framework, the *Baker Hughes* rebuttable presumption fails to accurately reflect the probative value of evidence at each step of the analysis. One example of this has already been discussed: just as stage-one evidence is irrelevant in stage three of the *McDonnell Douglas* framework, *Baker Hughes* attempts to describe the production of rebuttal evidence as shifting all further evidentiary focus to *additional* theories of competitive harm in the third stage of the framework. But evidence that a merger will result in undue concentration does not lose its probative value simply because a minimally sufficient rebuttal has been produced.¹⁷¹

To the contrary, a proper assessment of competitive effects in the third step of the *Baker Hughes* framework *requires* consideration of market concentration in addition to other theories of harm. As previously noted, market concentration evidence is relevant for both its own circumstantial inference of competitive consequences *and* its tendency to explain and strengthen other theories of competitive harm, such as an argument that a merger will make anticompetitive coordination more likely.¹⁷² Given this interrelation of probative value, it is not only unjustified but actually improper to artificially separate the plaintiff's evidentiary bases when thinking about the merits of a Section 7 complaint.

In light of the actual order and value of evidence in typical Section 7 cases, circuits

168. *United States v. Baker Hughes Inc.*, 908 F.2d 981, 983 (D.C. Cir. 1990).

169. *F.T.C. v. Univ. Health, Inc.*, 938 F.2d 1206, 1219 n.25 (11th Cir. 1991).

170. *See, e.g., id.* ("In practice, however, the government usually introduces all of its evidence at one time, and the defendant responds in kind."); *Chi. Bridge & Iron Co. N.V. v. F.T.C.*, 534 F.3d 410, 423–24 (5th Cir. 2008) (contrasting typical procedure with *Baker Hughes* in noting that "as occurs in most cases, the Government introduced all of its evidence at once").

171. *See supra* notes 146–148 and accompanying text (comparing the *Baker Hughes* framework with the procedure of a logical inference).

172. *See supra* notes 21, 134 and accompanying text (discussing the various relationships between market concentration evidence and potential competitive harm).

following the *Baker Hughes* interpretation of the structural presumption have generally adopted a flexible approach to the evaluation of evidence in the burden-shifting framework.¹⁷³ For example, in deciding whether the defendant has met its rebuttal obligation under the framework, courts may weigh rebuttal evidence against the combined weight of (1) the plaintiff's market concentration evidence, (2) specific theories of anticompetitive harm articulated by the plaintiff, and (3) preemptive counter-rebuttal evidence presented by the plaintiff during its case in chief.¹⁷⁴

This flexible approach corrects some of the noted procedural defects in the *Baker Hughes* framework and properly invites courts to assess the probative value of market concentration evidence in relation to specific theories of competitive harm.¹⁷⁵ But the effect of this ostensibly small procedural change is actually quite significant: it eliminates what little structure still remained to distinguish the *Baker Hughes* rebuttable presumption from a substantive inference weighed in relation to all the facts and evidence. So once again, and finally, the *Baker Hughes* rebuttable presumption interpretation of the structural presumption collapses back into the substantive inference interpretation articulated in *Philadelphia National Bank*.

V. NORMATIVE ANALYSIS

The previous Parts show the substantive inference interpretation of the structural presumption superior to the rebuttable presumption interpretation as a positive statement of law. Treating the structural presumption as a substantive inference follows authoritative precedent in antitrust law and better fits the intersection of evidence law and the substantive law of antitrust on the use of market concentration evidence in Section 7 litigation. Normative concerns also recommend the substantive inference interpretation.

Two procedural considerations prove the rebuttable presumption framework unappealing as a matter of legal policy. First, applying the structural presumption as a rebuttable presumption needlessly complicates horizontal merger analysis. At best, this treatment of market concentration evidence is no better than the substantive inference

173. See, e.g., *Chi. Bridge*, 534 F.3d at 423–24 (“The Government’s evidence not only established its *prima facie* case that [the merger] likely would have anti-competitive effects; it also served as a redoubt against [the defendant’s] evidence that actual or potential entry of new competitors would offset the merger’s substantial lessening of competition.”); *F.T.C. v. Butterworth Health Corp.*, No. 96-2440, 1997 WL 420543, at *1 (6th Cir. July 8, 1997) (noting that horizontal merger cases are “typically analyzed under a somewhat artificial [Baker Hughes] burden-shifting approach”); *Olin Corp. v. F.T.C.*, 986 F.2d 1295, 1305 (9th Cir. 1993) (“The clearest reason why *Baker Hughes* does not control here is that the Commission responded to the Company’s rebuttal [during the presentation of evidence in its case in chief], whereas in *Baker Hughes* the government did not.”); *Univ. Health*, 938 F.2d at 1220 (simultaneously assessing the plaintiff’s “strong *prima facie* case” and its additional evidence of “substantial barriers to entry into the relevant market” in deciding whether the defendant had made out a sufficient rebuttal).

174. E.g., *Chi. Bridge*, 534 F.3d at 424–25 (adopting what the Fifth Circuit characterizes as the Ninth and Eleventh Circuit interpretations of the *Baker Hughes* burden-shifting structure: “a flexible framework rather than an air-tight rule” in which “evidence is often considered all at once and the burdens are often analyzed together,” thereby avoiding “practical difficulties in separating the burden to persuade and the burdens to produce”) (citations omitted).

175. See *supra* notes 132–135, 139–146 and accompanying text (describing the proper interpretation of market concentration evidence).

approach. At worst, the rebuttable presumption framework confuses analysis and increases the likelihood of mistakes in litigation. Second, by casting evidence of undue concentration as the basic fact in a burden-shifting framework of procedural convenience, the rebuttable presumption approach invites courts and analysts to artificially undervalue the substantive relevance of market concentration evidence. Again, the rebuttable presumption approach is at best no better than the substantive inference approach, and at worst, the formal presumption framework perniciously biases the proper weighing of evidence in merger analysis.

A. Confusion of Horizontal Merger Analysis

Edward Morgan warns that “[e]very writer of sufficient intelligence to appreciate the difficulties of the subject-matter has approached the topic of presumptions with a sense of hopelessness and has left it with a feeling of despair.”¹⁷⁶ The procedural complexity of rebuttable presumptions counsels that they be deployed sparingly and only when suited to the evidence and substantive purpose served.¹⁷⁷ If the normative inquiry is whether the benefits of creating a rebuttable presumption exceed the costs, it should be conceded that the difficulties of burden-shifting presumptions often seem to outweigh the benefits.¹⁷⁸

Against this cost-benefit yardstick, the normative providence of the substantive inference treatment of market concentration evidence can be compared with the rebuttable presumption approach. It is not a close call. The rebuttable presumption interpretation of the structural presumption confers no advantage over the substantive inference interpretation; but it does inject incremental complexity and opportunities for confusion into horizontal merger analysis.

To begin, the rebuttable presumption interpretation affords no real benefits over the substantive inference interpretation. As Part IV of this Article shows, the modern rebuttable presumption interpretation should collapse into the *Philadelphia National Bank* substantive inference in most practical applications. This follows from the independent probative value of market concentration evidence, the robustness of this probative value to technical rebuttal of a formal presumption, and judicial deviations from the *Baker Hughes* rebuttable presumption framework to engage in more flexible evaluation of the evidence. If all parties exercised perfect legal and economic discretion

176. Edmund M. Morgan, *Presumptions*, 12 WASH. L. REV. & ST. B. J. 255, 255 (1937).

177. Cf. Joel S. Hjelmaas, *Stepping Back from the Thicket: A Proposal for the Treatment of Rebuttable Presumptions and Inferences*, 42 DRAKE L. REV. 427, 427–28 (1993) (“Few legal concepts have generated the amount of confusion that has characterized the use of rebuttable presumptions in civil proceedings Despite extensive commentary, dealing with rebuttable presumptions in civil litigation remains as difficult and unpredictable as ever.”); see generally Fenner, *supra* note 52; see also MUELLER & KIRKPATRICK, *supra* note 41, § 3:1 (“At the outset it should be conceded that the [Federal Rules] neither dissipate the slipperiness of the concept [of presumption] nor resolve the historic uncertainties about its operative scope. Lawyers and courts still grapple with the complexities and confusions that have enshrouded the subject for generations.”).

178. Compare Julius Ness Richardson, *Shifting the Burden of Production Under Rule 4(k)(2): A Cost-Minimizing Approach*, 69 U. CHI. L. REV. 1427, 1436 (2002) (“Courts should allocate the burden of proof so as to minimize the social costs associated with deciding disputes.”), with Sperino, *supra* note 164, at 745 (“Since 1973, both courts and litigants have struggled to understand and apply the [Title VII] three-step burden-shifting framework.”), and *id.* at 791–93 (noting that three-part burden-shifting tests are difficult to reduce to jury instructions and are not applied uniformly across different circuits).

in applying the *Baker Hughes* framework, then the rebuttable presumption interpretation of the structural presumption would, in practice, be identical to the substantive inference approach.

But the *Baker Hughes* interpretation of the structural presumption does differ from a substantive inference approach in that the burden-shifting framework injects numerous complexities and opportunities for confusion into Section 7 litigation. It imports into the evaluation of market concentration evidence all the uncertainty and confusion surrounding rebuttable presumptions in other areas of law. Examples include questions about the interpretation of un-rebutted presumptions,¹⁷⁹ the standard of production on rebuttal,¹⁸⁰ the effect of rebuttal on the presumed fact and on subsequent inferences from the basic fact,¹⁸¹ and other thorny issues going to the evidentiary weight of presumed facts and the application of presumptions where a probative inference is also available.¹⁸² These usual complexities in dealing with rebuttable presumptions are then magnified by the poor fit of market concentration evidence to the role of the basic fact in a burden-shifting framework.¹⁸³ The resulting opportunities for confusion and distraction of merger analysis are easily illustrated by example.

A recent case study is the 2008 disposition of *Chicago Bridge & Iron Co. v. F.T.C.*,¹⁸⁴ in which the petitioner—who was the defendant below—argued that the Federal Trade Commission had demanded too strong a showing for rebuttal of a structural presumption. Specifically, the petitioner urged on appeal that in rebutting the structural presumption, it did not need to reach the high bar of actually *persuading* the Commission that the inference of anticompetitive effects from market concentration evidence was infirm.¹⁸⁵ Rather, the defendant argued that its only obligation was to “come forward with *some* evidence challenging the presumed fact,” at which point the structural presumption should “simply disappear” from the case.¹⁸⁶ The Fifth Circuit declined to follow the argument, but was unable to articulate a satisfying explanation why the petitioner’s reasoning was wrong. Rather than simply recognizing that even if the legal presumption of anticompetitive effects had been rebutted, the Commission would still have been competent to draw a substantive inference of anticompetitive effects from evidence of undue concentration, the opinion rested on the procedurally confused suggestion that the government had preemptively strengthened its *prima facie* showing to

179. See *supra* notes 51–53 and accompanying text (discussing the Federal Rule of Evidence on burden-shifting presumptions).

180. See MCCORMICK ON EVIDENCE, *supra* note 29, § 344; cf. *United States v. Baker Hughes Inc.*, 908 F.2d 981, 991 (D.C. Cir. 1990) (describing a non-standard rebuttal framework).

181. See *supra* note 140 and accompanying text (discussing the effect of rebuttal on the presumed fact and on any inferences that may be independently draw from the basic fact).

182. See *Allen*, *supra* note 26, at 855–59 (discussing complexities that arise when presumptions are treated as having evidentiary weight and when presumptions are used to comment on the probative value of evidence and suggesting that neither function is better achieved by presumptions than by other procedural devices).

183. See *supra* Part IV (discussing the appropriate procedural interpretation of market concentration evidence in merger analysis, and noting the inappropriate treatment of this evidence in the *Baker Hughes* framework).

184. *Chi. Bridge & Iron Co. N.V. v. F.T.C.*, 534 F.3d 410 (5th Cir. 2008).

185. Petitioners’ Brief at *23, *Chi. Bridge & Iron Co. N.V. v. F.T.C.*, 534 F.3d 410 (5th Cir. 2008) (No. 05–60192), 2006 WL 6130409.

186. *Id.* (citing *Pennzoil Co. v. Federal Energy Regulatory Comm’n*, 789 F.2d 1128, 1137 (5th Cir. 1986)) (emphasis added).

survive the defendant's rebuttal evidence.¹⁸⁷

Related distractions in the *Baker Hughes* rebuttable presumption framework have not yet been tested in the court system, but are potentially even more dangerous. For example, an argument can be made of judicial remarks about a strong rebuttal being needed to respond to a strong prima facie case in the *Baker Hughes* framework.¹⁸⁸ As noted previously, the term "prima facie case" can mean either a showing sufficient to satisfy the plaintiff's burden of production or a demonstration of basic facts in a rebuttable presumption.¹⁸⁹ Under the *Baker Hughes* rebuttable presumption interpretation of the structural presumption, a subtle distinction is thus required between the overall strength of the plaintiff's evidentiary showing (a prima facie showing in the first sense) and the adequacy of the plaintiff's market concentration evidence (a prima facie showing in the second sense).

Without great care in terminology, it becomes impossible to determine the standard of production on rebuttal, what facts the defendant has the burden to rebut, and what inferences are implicated by a successful rebuttal. For example, if the plaintiff proffers evidence of undue concentration in addition to a direct theory of competitive harm, does the defendant bear the burden to rebut the presumption of competitive harm arising only from the market concentration showing, or is the actual burden to rebut the combined weight of the plaintiff's joint theories of harm? One would assume the former, but some recent decisions could be read to imply otherwise.¹⁹⁰ Such imprecision in discussion of prima facie showings may risk impermissible shifting of the burden of persuasion in this context.¹⁹¹

These examples of the potential confusion and distraction of horizontal merger analysis are unique to the rebuttable presumption interpretation of the structural presumption. Treating evidence of undue concentration as supporting a substantive inference of anticompetitive effects raises no such difficulties. This is not to say that treating the structural presumption as a substantive inference is without its own

187. See *Chi. Bridge*, 534 F.3d at 423–24 (commenting on the plaintiff's evidence as supporting not only a prima facie case but also creating a "redoubt" against the defendant's subsequent rebuttal arguments).

188. See *United States v. Baker Hughes Inc.*, 908 F.2d 981, 991 (D.C. Cir. 1990) ("The more compelling the prima facie case, the more evidence the defendant must present to rebut it successfully."); accord *Chi. Bridge*, 534 F.3d at 426 ("[I]f a Government's prima facie case anticipates and addresses the respondent's rebuttal evidence, as in this case, the prima facie case is very compelling and significantly strengthened.")

189. See *supra* notes 31–32 and accompanying text (explaining the two ways the phrase "prima facie case" may be used); MUELLER & KIRKPATRICK, *supra* note 41, § 3:6.

190. Cf. *F.T.C. v. Univ. Health, Inc.*, 938 F.2d 1206, 1220 (11th Cir. 1991) (commenting that "the FTC established a strong prima facie case that the proposed acquisition would substantially lessen competition" and that "the FTC bolstered this prima facie case with evidence that substantial barriers to entry into the relevant market exist" before concluding that the defendant failed to rebut this prima facie showing by the production of evidence sufficient "[t]o overcome the strong presumption of illegality to which the FTC is entitled, based on its showing"); *Chi. Bridge*, 534 F.3d at 424–25 (defining the plaintiff's prima facie case to include evidence other than market concentration while still "preserv[ing] the prima facie presumption if the [defendant] fails to satisfy the burden of production in light of contrary evidence in the prima facie case").

191. Cf. *Chi. Bridge*, 534 F.3d at 425–26 (noting that "the Commission cannot impose too exacting a standard [in assessment of the defendant's rebuttal argument] that might approach a burden of persuasion," before continuing that "[b]y carefully examining the rebuttal evidence in light of strong and relevant contrary evidence in the prima facie case, the Commission did not unjustifiably impose a 'heavy burden' on [the defendant] to 'clearly' disprove future anti-competitive effects").

interpretive difficulties and procedural costs. Unstructured all-the-facts-and-circumstances analysis often leads to outcome unpredictability and other procedural costs.¹⁹² But these problems are no less present under the rebuttable presumption interpretation because practical collapse of the rebuttable presumption framework into a substantive inference, language about variable burdens of production on rebuttal, and loose attention to rebuttal procedure all mean that, in practice, the rebuttable presumption approach suffers the exact same disadvantages as the substantive inference approach.

To summarize, the rebuttable presumption interpretation of the structural presumption introduces numerous procedural complexities into the analysis of market concentration evidence, as well as opportunities for distraction and confusion of the substantive law. And it has no real advantages over the substantive inference approach. With no benefits but additional costs, the rebuttable presumption interpretation of the structural presumption is, as a policy matter, inferior to the simpler substantive inference interpretation.

B. Undervaluation of Market Concentration Evidence

A second reason to prefer the substantive inference interpretation of the structural presumption is that the rebuttable presumption interpretation appears likely to artificially diminish the intrinsic probative value of market concentration evidence. At the outset, it must be conceded that opinions differ on the economic importance of market concentration evidence as a predictor of the likely competitive consequences of a merger. While most economists consider market concentration an important factor in horizontal merger analyses,¹⁹³ some commentators find the probative value of this evidence less compelling.¹⁹⁴ This Article adopts the majority view, but the undesirability of diminishing the weight of market concentration evidence as a byproduct of the legal framework (rather than on substantive economic grounds) should be persuasive to those

192. Cf. Jesse W. Markham, Jr., *Sailing A Sea of Doubt: A Critique of the Rule of Reason in U.S. Antitrust Law*, 17 *FORDHAM J. CORP. & FIN. L.* 591, 594 (2012) (commenting on the unpredictability and procedural cost of unstructured rule of reason analysis, “a set of vague and inconsistent objectives that a court should set for itself in evaluating conduct under an antitrust challenge,” particularly insofar as litigants are exposed to the risk that a reviewing court may unpredictably favor a broader or shallower scope of inquiry); see generally Andrew I. Gavil, *Moving Beyond Caricature and Characterization: The Modern Rule of Reason in Practice*, 85 *S. CAL. L. REV.* 733, 769 (2012) (collecting complaints about the unpredictability and procedural costs of unstructured rule of reason analysis).

193. See, e.g., Baker & Salop, *supra* note 3, at 9–10 (“[C]ontemporary economic learning on the relationship between market concentration and price suggests that concentration be treated as an important factor relevant to the competitive effects analysis—one that is appropriately considered in conjunction with other factors suggested by the competitive effects theory.”); Baker & Shapiro, *supra* note 1, at 252 (“The clear lesson from oligopoly theory is that market concentration matters [subject to the influence of other structural factors.]”); see also *supra* notes 18, 20–21 (noting support for the use of market concentration in predicting anticompetitive effects under a variety of models and assumptions).

194. See, e.g., Paul T. Denis, *Horizontal Merger Guidelines Revision: A Draftsman’s Perspective*, 7 *GCP: THE ANTITRUST CHRONICLE*, Dec. 2009 (“One concept that should not be found in the next merger guidelines is the structural presumption.”); *id.* at 8 (“[I]t is now widely understood that a host of other market characteristics are relevant and there is no necessary relationship between market concentration and competitive effects.”); Harkrider, *supra* note 2, at 332 (“Because [market concentration data] are not supported by sufficient empirical evidence they increase the risk that where they are relied upon, courts and agencies will enjoin mergers that do not present competitive harm.”).

of the minority view as well.

As emphasized throughout this Article, evidence of undue concentration supports a substantive inference of the likely anticompetitive effects of a merger.¹⁹⁵ The strength of this inference has evolved over time, mirroring changes in economic thinking about the relevance of market concentration in predicting the competitive consequences of a merger.¹⁹⁶ But however the fact-finder interprets the state of economic thinking at the time of decision, applying the structural presumption as a substantive inference has the advantage of directly connecting the evidentiary weight of market concentration evidence to an assessment of its intrinsic probative value at trial.

By contrast, interpreting the structural presumption as a rebuttable presumption obscures the connection between the evidentiary weight of market concentration evidence and its probative value in predicting the competitive effects of mergers. Cast in the posture of the basic fact in a rebuttable presumption of procedural convenience, the intrinsic relevance of market concentration evidence is likely to be overlooked or assigned too little weight in the analysis of courts and practitioners. At least four arguments support this conclusion.

First, the intrinsic probative value of market concentration evidence is likely to be overlooked when the structural presumption is framed as a formal legal presumption. Depending on the jurisdiction, rebuttable presumptions are treated as having no evidentiary weight, or as having weight conferred by legal mandate alone.¹⁹⁷ The probative value of market concentration evidence is easily missed in the posture of mere basic fact evidence, particularly when focus is on the procedure of presumptions. Parallels in the structure of *Baker Hughes* burden-shifting and Title VII litigation only increase the likelihood that the intrinsic probative value of market concentration evidence will be overlooked by analogy to the relatively low probative value of basic facts in the Title VII context.¹⁹⁸

Evidence that the rebuttable presumption interpretation is having the hypothesized effect is apparent in much of the extant debate on the structural presumption. Commentary focusing on the legal framework of presumptions and ignoring the substantive inference supported by market concentration evidence is symptomatic of the concern.¹⁹⁹ More troubling yet are affirmative assertions that market concentration

195. See *supra* notes 18, 21, 59–66 and accompanying text (concerning the probative value of market concentration evidence in assessing the potential for a merger to cause competitive harm).

196. See *supra* notes 15–18 and accompanying text (describing the evolution of economic thinking on the value of market concentration evidence as a predictor of potential competitive harm).

197. Compare Allen, *supra* note 26, at 855 (noting authority for treating presumptions as having evidentiary weight), with *Lynn v. Cepurneek*, 508 A.2d 308, 312 (Pa. Super. Ct. 1986) (“A presumption is not evidence and has no weight as such.”) (citing *Watkins v. Prudential Ins. Co.*, 173 A. 644, 649 (Pa. 1934)).

198. Cf. WRIGHT ET AL., *supra* note 9 (“Thayer and Wigmore saw presumptions as devices of procedural convenience. Presumptions provided a handy way of dealing with inferences arising from the basic fact *in the absence of any evidence of the presumed fact*. But once the opponent introduced evidence showing the nonexistence of the presumed fact, the presumption dropped out of the case.”) (emphasis added); *id.* at n.78 (“[P]resumption has no probative value but merely allows factfinder to reach conclusion in absence of proof to the contrary.”) (citing *Jones v. LSU/EA Conway Med. Ctr.*, 46 So. 3d 205, 211 (La. Ct. App. 2010)).

199. Cf. Eleanor Fox, Comments at the NYU School of Law, FTC Horizontal Merger Guidelines Review Project (December 8, 2009), at 94:25–95:15, https://www.ftc.gov/sites/default/files/documents/public_events/horizontal-merger-guidelines-review-project/091208transcript.pdf (asking whether market concentration benchmarks in the Horizontal Merger

evidence expressly *does not* support a substantive inference. Examples include comments to the effect that market concentration evidence serves only an “evidentiary” role without any “substantive significance” of its own,²⁰⁰ or that it provides merely a safe harbor for defendants when market concentration is not extreme.²⁰¹

Second, even if the substantive inference is not overlooked entirely, it is still likely to be undervalued when the structural presumption is framed as a rebuttable presumption. Focus on the language and procedure of presumptions predictably displaces consideration of the independent probative value of basic fact evidence in this framework. Without directly engaging the economic basis on which market concentration evidence is relevant, it is not possible to accord appropriate analytical weight to proof of undue concentration.²⁰²

Again, there is evidence to support this concern. Failures of courts to appreciate the basic relevance of market concentration evidence are apparent in the language and argument of recent opinions.²⁰³ And the centrality of economic thinking in the analysis of *Brown Shoe* and *Philadelphia National Bank* compares with the dearth of economic discussion in recent merger cases that merely cite prior case law for the *legal* presumption of anticompetitive effects supported by undue concentration.²⁰⁴ These repeated failures of courts and litigants to directly consider the economic relevance of market concentration evidence recursively erode the perceived probative value of this evidence, and help explain recent commentary on the growing undervaluation of market concentration in horizontal merger analysis.²⁰⁵

Third, even if the substantive inference is not overlooked or undervalued, the rebuttable presumption interpretation of the structural presumption invites courts and litigants to conflate rebuttal of the presumed fact with rebuttal of the independent probative value of the underlying market concentration evidence.²⁰⁶ Particularly in the

Guidelines should be clarified as simply “a presumption that arises [from law]” under *Philadelphia National Bank*, including a statement that reliance on market concentration “is not necessarily a logical inference. It shifts the burden of going forward”).

200. Denis, *supra* note 194, at 7–8 (“[In *Baker Hughes*] then Judge (now Justice) Thomas explained that *presumptions merely were of evidentiary not substantive significance*. Once the government established the structural presumption, the burden of coming forward with evidence to rebut the presumption shifted to the merging parties, but the overall burden of persuasion remained at all times with the government.”) (emphasis added).

201. Cf. Darren S. Tucker, *Seventeen Years Later: Thoughts on Revising the Horizontal Merger Guidelines*, ANTITRUST SOURCE 8 (Oct. 2009) (“[T]he Guidelines should clarify that the HHI thresholds are merely safe harbors and that failure to meet a safe harbor does not carry with it a presumption of competitive concerns or the enhancement of market power.”).

202. Cf. Allen, *supra* note 26, at 856 (noting that legal presumptions do little “to inform the jury *what* the instruction [of a presumption] means or *why* a particular result might be appropriate”); *id.* at 857 (addressing the question “How can one weight a presumption against, or with, or as, evidence?” with the answer that “the jury cannot ‘weight the presumption’ as evidence, for it is not evidence”).

203. *E.g.*, *United States v. Oracle Corp.*, 331 F. Supp. 2d 1098, 1112 (N.D. Cal. 2004) (appearing to distinguish focus on “statistical data” from inquiry into the “likely competitive effects of the merger”).

204. *E.g.*, *United States v. H&R Block, Inc.*, 833 F. Supp. 2d 36, §§ II, III.B.1 (D.D.C. 2011) (discussing case law and not referencing or engaging with economic thinking).

205. See Baker & Shapiro, *supra* note 1, §§ 1–2 (noting that decline in the evidentiary weight of market concentration evidence has outpaced mainstream economic retreat from the excessive attention paid to this evidence in the 1960s and 1970s).

206. See *supra* notes 185–187 and accompanying text (describing an example where rebuttal of the

dominant *Thayer-Wigmore* school of thought, presumptions are flimsy devices with no independent probative value. Put poetically, presumptions are treated “like bats of the law flitting in the twilight, but disappearing in the sunshine of actual facts.”²⁰⁷ The danger is that the flimsiness of legal presumptions will be falsely translated as implying that evidence of undue concentration is itself easily rebutted and of the low intrinsic probative value.²⁰⁸

Again, there is evidence that this false analogy is finding purchase. One example in case law is the “bubble-bursting” argument of the *Chicago Bridge* petitioner, treating rebuttal of the legal presumption of anticompetitive effects as full refutation of the probative value of the plaintiff’s market concentration evidence.²⁰⁹ The reviewing court’s failure to properly analyze this argument by simply discussing the independent probative value of the market concentration figures still in evidence is even stronger proof of the problem.²¹⁰ But in general, evidence of this concern may be difficult to document. The real problem is not about explicit arguments, but the implicit weighing of evidence by courts and analysts. Conflation of rebuttal with substantive refutation of the underlying evidence may easily color final decisions without generating any explicit indication of this effect.

Fourth, even if none of the previous three concerns applied, the *Baker Hughes* rebuttable presumption would still tend to cause the undervaluation of market concentration evidence by the way it orders analysis. Structuring the rebuttable presumption such that direct theories of competitive harm are considered only after market concentration evidence has been rebutted obscures the complimentary interaction between market concentration evidence and direct theories of competitive harm. As previously discussed, market concentration evidence is relevant not only for a circumstantial inference of anticompetitive effects, but also for its tendency to strengthen other direct theories of competitive harm.²¹¹ These direct theories of harm are artificially disadvantaged when judged against the plaintiff’s burden of persuasion in a vacuum free of market concentration context.²¹²

Obvious evidence of this hypothesized effect is again difficult to highlight, as the

presumption is interpreted as negation of the probative value of the underlying evidence).

207. MCCORMICK ON EVIDENCE, *supra* note 29, § 344, at 692 (quoting *Mackowik v. Kan. City, St. J. & C.B.R. Co.*, 94 S.W. 256, 262 (Mo. 1906)).

208. See *supra* notes 139–140 and accompanying text (discussing how market concentration continues to support many substantive economic inferences irrespective the defendant’s mere production of rebuttal evidence).

209. See, e.g., Petitioner’s Brief, *supra* note 185, at *23–29, *34 (arguing that the antitrust plaintiff was “required to prove anticompetitive effects, something it never did” despite the plaintiff’s establishment of a “strong prima facie case” because the structural presumption had been rebutted by the defendant’s minimally adequate production of “some evidence to the contrary” of the presumed fact).

210. See *supra* notes 185–187 and accompanying text (describing the relevant argument and reasoning).

211. See *supra* note 21 and accompanying text (describing the various ways in which market concentration evidence is relevant to competitive effects analysis).

212. Cf. Lawrence M. Frankel, *The Flawed Institutional Design of U.S. Merger Review: Stacking the Deck Against Enforcement*, 2008 UTAH L. REV. 159, 179 (2008) (“[I]t may well appear impossible to a judge with little prior background in antitrust or economics to make any reliable prediction regarding the likely consequences of the particular merger in question. In such a case, the judge will conclude that the case is ‘not proven’ and rule against the party with the burden of proof—the plaintiff agency.”) (citations omitted). This prediction is especially apt when predictions are made in the absence of market concentration context.

concern again arises from bias in the implicit weighing of evidence by the fact-finder. But the concern is supported by recent work on the cognitive psychology of legal decision-making.

For example, relegating market concentration evidence to an early and quickly surpassed stage of the analysis in the rebuttable presumption framework exposes market concentration evidence to recency bias.²¹³ This reduces its cognitive availability in the ultimate weighing of evidence, and thus suppresses its subjective evidentiary weight. Implicit pattern matching may also bias subjective assessment of market concentration evidence.²¹⁴ For example, the similarity of the *Baker Hughes* and *McDonnell Douglas* burden-shifting frameworks supports a false analogical conclusion that market concentration evidence is entitled to little subjective weight in competitive effects analysis, just as the basic facts in the *McDonnell Douglas* framework bear little relevance to the final stage of that analysis.

To summarize, the *Baker Hughes* rebuttable presumption creates many opportunities for undervaluation of market concentration evidence in the competitive effects analysis of horizontal mergers. By contrast, the substantive inference approach of *Philadelphia National Bank* implies no such biases. Even if scrupulous care were taken to overcome these structural biases, the risk of wrongful undervaluation, combined with the lack of any offsetting benefits to justify this risk, again shows the substantive inference interpretation superior to the rebuttable-inference interpretation on basic policy grounds.

VI. CONCLUSION

The goal of this Article has been to clarify the meaning of the structural presumption and the role played by market concentration evidence in the antitrust law of mergers. Clarity comes from addressing a foundational ambiguity neglected in the extant literature: what type of presumption is it that the structural presumption entails? The potential choices are as follows: (1) the structural presumption could be a substantive factual inference based on economic theory and independently probative of the competitive consequences of a merger, or (2) the structural presumption could be a procedural device for artificially shifting the burden of production at trial.²¹⁵

On multiple grounds, this Article has argued that interpreting the structural presumption, as a substantive inference is the better choice. First, this interpretation is consistent with controlling authority on the role of market concentration evidence in Section 7 litigation. Second, the substantive inference interpretation is the better description of evidentiary procedure and the substantive law of antitrust. Third, the substantive inference approach is the better interpretation on normative policy grounds. The rebuttable presumption interpretation confers no advantage over the substantive inference approach but does entail substantial disadvantages: it is more apt to confuse and distract litigation with procedural details irrelevant to the substantive law, and it is likely

213. Cf. José H. Kerstholt & Janet L. Jackson, *Judicial Decision Making: Order of Evidence Presentation and Availability of Background Information*, 12 APPLIED COGNITIVE PSYCHOL. 445 (1998) (discussing the psychological biases caused by order effects in the presentation and evaluation of evidence at trial).

214. See DANIEL KAHNEMAN, THINKING, FAST AND SLOW ch. 4, 5, 9 (Farrar et al. 2001) (discussing implicit pattern matching and related cognitive processes).

215. See FED. R. EVID. 301 (describing the handling of presumptions in civil cases under the federal rules).

to artificially diminish the apparent relevance of market concentration evidence in competitive effects analysis. This clarified understanding of the structural presumption has two immediate implications for the future of horizontal merger analysis.

First, the normative arguments in this Article reveal subtle but important problems with the modern rebuttable presumption approach to the structural presumption. This framework obscures the intrinsic probative value of market concentration evidence, complicating and obstructing critical examination of the evidence. Far from conferring artificial weight to evidence of little probative value, the conceptual framework of rebuttable presumptions actually appears to weaken the intrinsic probative value of market concentration evidence. Returning to a substantive inference interpretation of the structural presumption corrects these problems. Moving forward, courts should abandon the language of formal presumptions and should simply return to the factual-inference approach of *Philadelphia National Bank*.

Second, the conclusions of this Article narrow the field of debate for subsequent academic work on the structural presumption. Economic inquiry into the value of market concentration evidence as a predictor of competitive effects should continue, but legal arguments about the calibration and usefulness of the structural presumption in merger analysis are not needed. Market concentration evidence deserves precisely its intrinsic probative value, which is a fact question outside the ambit of legal debate.

One question that might be asked at this point is how much the distinction between substantive inferences and rebuttable presumptions actually matters in Section 7 litigation. The procedural and interpretive differences between these structures are legal and obscure, and judges may simply skip past them in the conventional Section 7 bench trial. Put another way, in a bench trial with the judge making conclusions of law as well as findings of fact, is a formal rebuttable presumption really that different from a factual inference drawn from the combined weight of all the evidence?²¹⁶

The answer is that the difference persists in the bench trial setting, and may in fact be more important here than in a trial by jury. The language of presumptions often appears prominently in judicial findings of fact,²¹⁷ and a strong argument may be made that judges use presumptions as a substitute for critical thinking and the need to explain decision-making on questions of fact. For example, Laughlin notes that “in non-jury cases what are called presumptions are in most instances reasoning principles.”²¹⁸ He similarly comments that judges fail to reason critically when presumptions are close at hand, stating, “[c]ourts have too frequently behaved like law students when pushed to solve a particular problem. Instead of analyzing they glibly seize upon such and such a presumption.”²¹⁹

The parallel between Laughlin’s criticism of judges and the evolution of the structural presumption is striking. The structural presumption started out as a substantive

216. Modern evidence texts and treatises limit discussion of presumptions to the context of jury trials, with the difficult questions being whether and how the existence of a presumption is articulated to the jury. Surprisingly little discussion is devoted to the role of rebuttable presumptions in bench trials. See, e.g., MCCORMICK ON EVIDENCE, *supra* note 29, §§ 342–44; see generally WRIGHT ET AL., *supra* note 9.

217. See Laughlin, *supra* note 26, at 198 (“By actual count of a number of cases in which the word ‘presumption’ is used it was found that well over half were non-jury cases.”) (internal citation omitted).

218. *Id.* at 197–98.

219. *Id.* at 196.

inference informed by the received economic wisdom of the 1960s. In the 1970s, it was still being applied as a substantive inference, but with increasing adornment in the language of *prima facie* cases. Rather than directly citing economic analysis, opinions would refer to the probative-value justification of earlier decisions. By the 1980s, the structural presumption was being spoken of and applied in the rote language of legal presumptions. Earlier cases were cited not for their commentary on the economic value of market concentration evidence, but for a formal *presumption* that would dictate decision-making in light of this evidence. By the 1990s, the structural presumption was being applied as a *mere* presumption. The underlying factual inference having by this point eroded from the analysis, it is unclear how market concentration evidence is to be weighed in competitive effects analysis, if at all.

This history illustrates the pernicious way in which the distinction between a substantive inference and rebuttable presumption afflicts Section 7 analysis. The subtlety of distinction does not imply a lack of danger in ignoring the difference; rather, the difference is dangerous precisely because it is subtle. This history also indicates that simply changing the language of modern merger analysis from presumptions to inferences is unlikely to suffice in restoring market concentration evidence to its proper role in the antitrust law of mergers. For that result, courts and analysts will once again need to engage the economic relevance of market concentration to competitive effects analysis. Affording the structural presumption the dignity of a substantive factual inference is only the first step in restoring critical thought to this old, but still important, aspect of the antitrust analysis of mergers.