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POLICY BRIEF

New Merger Guidelines Treat a Proposed Merger Like Schrödinger's Cat

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Section 7 of the Clayton Act prohibits a merger if its effect "may be substantially to lessen competition."[1] Enforcement responsibility for section 7 is shared by the two federal antitrust enforcement agencies—the US Department of Justice and the Federal Trade Commission (the "Agencies"). In challenging a merger, the case law holds that the Agencies are required to establish a "reasonable probability" that a merger would harm competition. The Agencies, therefore, have compared the most likely future with a proposed merger to the most likely future without it.

In early 2022, the Agencies announced an effort to "modernize" the guidelines that describe their policies and practices in enforcing section 7. The Agencies committed to "faithfully track the statutory text, legislative history, and established case law around merger enforcement."[2] But the Agencies breached that commitment when they released new Merger Guidelines (MGs) on December 18, 2023.[3]

The new MGs jettison the reasonable probability standard, even though it was the aspect of section 7 law most deeply rooted in "the statutory text, legislative history, and established case law." For a proposed merger that plausibly harms competition, the Agencies no longer feel obliged to undertake the factual enquiry necessary to establish that the merger probably harms competition.

In effect, the Agencies treat a proposed merger like Schrödinger's cat—at the same time both substantially lessening competition and not substantially lessening competition. As a practical matter, this treatment reverses the burden of proof on any fact or circumstance that would resolve any of the indeterminacy associated with the competitive impact of a proposed merger.

PREDICTION UNDER SECTION 7 OF THE CLAYTON ACT

When Congress amended section 7 of the Clayton Act in 1950, the Senate Judiciary Committee's report explained:

> The words "may be" appear in the bill in defining the effect on competition of the forbidden acquisitions. Acquisitions are forbidden only where in any line of commerce in any section of the country the effect "may be" substantially to lessen competition or to tend to create a monopoly. The use of these words means that the bill, if enacted, would not apply to the mere possibility but only to the *reasonable probability* of the prescribed effect.[4]

When the Supreme Court first interpreted the amended section 7, it asserted that "Congress used the words '*may be* substantially to lessen competition' (emphasis supplied), to indicate that its concern was with probabilities, not certainties. Statutes existed for dealing with clear-cut menaces to competition; no statute was sought for dealing with ephemeral possibilities."[5] The court observed that "the very wording of § 7 requires a prognosis of the probable *future* effect of the merger," and it described its task in that case as to "predict the probable future consequences of this merger."[6] The court declared that "if there is a reasonable probability that [a] merger will substantially lessen competition . . . , the merger is proscribed."[7]

A year later, the Supreme Court explained that section 7 "requires . . . a prediction of its impact upon competitive conditions in the future; this is what is meant when it is said that the amended § 7 was intended to arrest anticompetitive tendencies in their 'incipiency.' "[8] And the court later cited the foregoing cases for the proposition that "[t]he core question is whether a merger substantially lessens competition, and necessarily requires a prediction of the merger's impact on competition, present and future. This section can deal only with probabilities, not with certainties."[9]

Courts of appeals have more recently referred to the reasonable probability standard.[10] In an oft-cited passage, Judge Posner explained that "all that is necessary" for a proposed merger to violate section 7 is that it "create an appreciable danger" of adverse "consequences in the future. A predictive judgment, necessarily probabilistic and judgmental rather than demonstrable, is called for."[11] Another appeals court recently observed that prediction "is precisely what" section 7 requires.[12]

The lower bound for a "reasonable probability" is something less than 50 percent,[13] but how much less is unclear because the law neither quantifies uncertainty nor makes fine distinctions. But the law does distinguish a probability from plausibility. The government's litigation burden under section 7 is to show, by a preponderance of evidence, that substantial harm to competition is more than plausible, even if not more likely than not.

A CLEAR CHANGE IN ENFORCEMENT POLICY

The new MGs supersede the 2010 Horizontal Merger Guidelines (HMGs),[14] which were in effect until the December release of the new MGs. The second paragraph of the HMGs stated:

> The Agencies seek to identify and challenge competitively harmful mergers while avoiding unnecessary interference with mergers that are either competitively beneficial or neutral. Most merger analysis is necessarily predictive, requiring an assessment of what will likely happen if a merger proceeds as compared to what will likely happen if it does not. Given this inherent need for prediction, these Guidelines reflect the congressional intent that merger enforcement should interdict competitive problems in their incipiency and that certainty about anticompetitive effect is seldom possible and not required for a merger to be illegal.[15]

The third paragraph of the new MGs states:

> Section 7 was designed to arrest anticompetitive tendencies in their incipiency. The Clayton Act therefore requires the Agencies to assess whether mergers present risk to competition. The Supreme Court has explained that "Section 7 itself creates a relatively expansive definition of antitrust liability: To show that a merger is unlawful, a plaintiff need only prove that its effect '*may be* substantially to lessen competition'" or to tend to create a monopoly. Accordingly, the Agencies do not attempt to predict the future or calculate precise effects of a merger with certainty. Rather, the Agencies examine the totality of the evidence available to assess the risk the merger presents.[16]

The contrast between these paragraphs presents multiple indications of a major change in policy. One indication is that the new MGs contain no statement comparable to the first sentence of the paragraph from the HMGs. Merger guidelines from 1982 through 2010 stated the intention to avoid interference with mergers that do not substantially lessen competition, but the new MGs indicate that the Agencies are not concerned about the possibility that they might deter mergers that are procompetitive or otherwise efficient.

A second indication is that the new MGs use the word "risk" instead of referring to "what will likely happen." The word "risk" in the MGs is even not accompanied by an intensifying adjective such as "appreciable," "dangerous," "substantial," or "undue." Moreover, the new MGs describe the facts and circumstances giving rise to a "risk" of harm to competition in a manner commensurate with mere plausibility, and they do not specify additional enquiries designed to determine "what likely will happen."

A third indication is that the new MGs directly contradict the HMGs on whether section 7 enforcement is a predictive exercise that compares two likely futures—one with the proposed merger and one without it. The new MGs insist that the Agencies "do not attempt to predict the future." But what is the alternative?

QUANTUM ANTITRUST

Erwin Schrödinger's thought experiment[17] on the implications of quantum mechanics entered into popular culture and has been alluded to by court decisions:

> A cat is penned up in a steel chamber, along with the following diabolical device (which must be secured against direct interference by the cat): in a Geiger counter there is a tiny bit of radioactive substance, so small, that perhaps in the course of one hour one of the atoms decays, but also, with equal probability, perhaps none; if it happens, the counter tube discharges and through a relay releases a hammer which shatters a small flask of hydrocyanic acid. If one has left this entire system to itself for an hour, one would say that the cat still lives if meanwhile no atom has decayed. The first atomic decay would have poisoned it. The [quantum mechanics wave function] would express this by having in it the living and the dead cat (pardon the expression) mixed or smeared out in equal parts.[18]

Schrödinger commented that "there is a difference between a shaky or out-of-focus photograph and a snapshot of clouds and fog banks," and his experiment sought to transform the "indeterminacy originally restricted to the atomic domain . . . into macroscopic indeterminacy, which [could] then be resolved by direct observation."[19] Merger enforcement, however, affords no means to fully resolve all indeterminacy. For a merger at the proposal stage, when section 7 typically is applied, neither the post-merger world nor the but-for world can be observed.

Observationally, a proposed merger has much in common with Schrödinger's cat penned up in a steel chamber. And the new MGs can be read to suggest a "quantum antitrust" approach to merger assessment by virtue of the fact that the new MGs devote thousands of words to the facts and circumstances under which a proposed merger plausibly harms competition but very few to the facts and circumstances that make harm probable. Rather than trying to identify the most likely future with and without a merger,[20] the Agencies now determine only whether a merger substantially lessens competition in a superposition of all plausible futures.

PLAUSIBILITY REPLACES PROBABILITY

Sections 2.2–2.6 of the new MGs articulate theories under which mergers can substantially lessen competition and set out conditions making the theories plausible. But sections 2.2–2.6 do not set out conditions making a substantial lessening of competition probable under any of the theories. The Agencies evidently take the position that the plausibility of a lessening of competition renders a merger unlawful under section 7 unless the merging parties demonstrate that it would not substantially lessen competition.

A merger of direct competitors is said to have "unilateral" anticompetitive effects when the lessening of competition does not arise from any sort of coordination in the decision making of the remaining competitors. Section 2.2 of the new MGs states that the Agencies presume that a merger substantially lessens competition under a unilateral effects theory when "evidence demonstrates substantial competition between the merging parties prior to the merger."[21] Section 2.2 contains nothing about distinguishing between a substantial and insubstantial lessening of competition.

A merger of direct competitors is said to have "coordinated" anticompetitive effects when the lessening of competition does entail some sort of coordination in the decision making of the remaining competitors. Section 2.3 of the new MGs states that the Agencies presume that a "merger materially increases the risk of coordination" if the relevant market is highly concentrated;[22] significant incumbents "have previously engaged in express or tacit coordination" or even "failed attempts"; *or* the merger eliminates a maverick.

Supreme Court merger decisions of the 1960s relied on 1960s thinking that concentration almost invariably resulted in coordination, and that greater concentration resulted in greater coordination.[23] But that view subsequently lost credibility.[24] The new MGs, however, contend that 1960s thinking is again relevant:

> In the Agencies' experience, structural conditions that prevent coordination are exceedingly rare in the modern economy. For example, coordination is more difficult when firms are unable to observe rivals' competitive offerings, but technological change has made this situation less common than in the past and reduced many traditional barriers or obstacles to observing the behavior of rivals in a market.[25]

But technological change has done nothing to prevent secret discounting in individually negotiated transactions, which is what economists have long viewed as the bane of coordination.

The new MGs devote much attention to mergers that do not involve two incumbent competitors in the same market. In the two theories described in section 2.4, one of the merging parties is an incumbent and the other is a potential competitor. The theory of "actual potential competition" is that the merging potential competitor would enter the market but for the merger and thereby increase competition. The theory of "perceived potential competition" is that the merger eliminates the salutary impact on competition the merging potential competitor already has as an entry threat.

The new MGs' treatment of "actual potential competition" might best illustrate how the Agencies have jettisoned the reasonable probability standard. Section 2.4.A mentions none of the reasons why a potential entrant would conclude that entry is bad bet, for example, that incumbents have massive advantages or that the market is in decline. Nor does section 2.4.A consider the important possibility that the merging potential entrant is just one of many similarly situated potential entrants, so the merger changes nothing.

The new MGs' treatment of "perceived potential competition" omits the critical limiting principle. Although the Supreme Court demanded proof that "the acquiring firm's premerger presence on the fringe of the target market in fact tempered oligopolistic behavior on the part of existing participants in that market,"[26] section 2.4.B asserts that "direct evidence that the firm's presence or behavior has affected or is affecting current market participants' strategic decisions is not necessary."

Section 2.5 discusses theories of harm to competition involving the combination of firms providing complementary goods or services. Section 2.5 focuses on the theory that the merged firm would withhold supply from rivals and categorizes the unprofitability of withholding as "rebuttal evidence" as to which the burden rests with the parties. Again, the new MGs examine only evidence that makes a lessening of competition plausible, even when unexamined evidence might render it highly improbable.

Section 2.6 concerns mergers that "entrench or extend an already dominant position." Section 2.6 sketches scenarios of potential concern,[27] but it does not discuss how the Agencies determine whether any such scenario is probable. Many of the scenarios involve exclusionary practices adopted after the proposed merger, but section 2.6 does not examine the incentive to adopt such practices or their legality under antitrust law. Section 2.6 also concerns plausibility rather than probability.

CONCLUSION

The heads of the federal antitrust enforcement Agencies most likely believe that the new MGs "faithfully track the statutory text, legislative history, and established case law around merger enforcement." But the new MGs abandon the most fundamental principle of merger antitrust law—the reasonable probability standard, which flows directly from the statutory text and was clearly articulated in the legislative history and established case law. Rather than identify what is most likely to happen, the federal antitrust enforcement Agencies treat a proposed merger like Schrödinger's cat—at the same time both substantially lessening competition and not substantially lessening competition.

ABOUT THE AUTHOR

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NOTES

1. Celler-Kefauver Act, ch. 1184, 64 Stat. 1125 (1950) (codified at 15 U.S.C. § 18).
2. US Department of Justice and Federal Trade Commission, "Request for Information on Merger Enforcement" (January 18, 2022), 1.
3. US Department of Justice and Federal Trade Commission, *Merger Guidelines* (hereinafter MGs), December 18, 2023.
4. S. Rep. No. 81-1775, at 6 (1950) (emphasis added).
5. Brown Shoe Co. v. United States, 370 U.S. 294, 323 (1962) (footnote omitted).
6. *Brown Shoe*, 370 U.S. at 332–33.
7. *Brown Shoe*, 370 U.S. at 325. While much in the Supreme Court merger decisions of the 1960s is out of step with modern antitrust law, the court's basic understanding of section 7 remains sound.
8. United States v. Philadelphia National Bank, 374 U.S. 321, 362 (1963).
9. FTC v. Procter & Gamble Co., 386 U.S. 321, 568 (1967) (citations omitted).
10. See United States v. AT&T, Inc., 916 F.3d 1029, 1032 (D.C. Cir. 2019) ("[T]he government must show that the proposed merger is likely to substantially lessen competition, which encompasses a concept of 'reasonable probability.' "); FTC v. University Health, Inc., 938 F.2d 1206, 1218 (11th Cir. 1991) ("[T]o satisfy section 7, the government must show a reasonable probability that the proposed transaction would substantially lessen competition in the future."); FTC v. Warner Communications Inc., 742 F.2d 1156, 1165 (9th Cir. 1984) ("It is well established that a section 7 violation is proven upon a showing of reasonable probability of anticompetitive effect."); Fruehauf Corp. v. FTC, 603 F.2d 345, 351 (2d Cir. 1979) ("[T]here must be 'the reasonable probability' of a substantial impairment of competition to render a merger illegal under § 7.").
11. Hospital Corp. of America v. FTC, 807 F.2d 1381, 1389 (7th Cir. 1986) (citation omitted). See also FTC v. Elders Grain, Inc., 868 F.2d 901, 906 (7th Cir. 1989) (Posner, J.) ("Section 7 forbids mergers and other acquisitions the effect of which 'may' be to lessen competition substantially. A certainty, even a high probability, need not be shown. Of course the word 'may' should not be taken literally, for if it were, every acquisition would be unlawful. But the statute requires a prediction, and doubts are to be resolved against the transaction.").
12. St. Alphonsus Medical Center-Nampa Inc. v. St. Luke's Health System, Ltd., 778 F.3d 775, 783 (9th Cir. 2015).
13. See Smith v. Cain, 565 U.S. 73, 75–76 (2012); United States v. Dominguez Benitez, 542 U.S. 74, 83 n.9 (2004); Strickler v. Greene, 527 U.S. 263, 300 (1999) (Souter, J., concurring in relevant part).
14. The new MGs also supersede the 2020 Vertical Merger Guidelines.
15. US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (hereinafter HMGs), August 19, 2010.
16. The quotation is from California v. American Stores Co., 495 U.S. 271, 284 (1990) (quoting 15 U.S.C. § 18 and citing *Brown Shoe*, 370 U.S. at 323).
17. Erwin Schrödinger, "Die gegenwärtige Situation in der Quantenmechanik," *Naturwissenschaften* 23 (1935): 807–28.
18. John D. Trimmer, "The Present Situation in Quantum Mechanics: A Translation of Schrödinger's 'Cat Paradox' Paper," *Proceedings of the American Philosophical Society* 124 (1980): 323–38, 328.
19. Trimmer, "The Present Situation," 328.
20. A leading model of proof in the legal system is "relative plausibility" or "reasoning to the best explanation." See, e.g., Ronald J. Allen and Michael S. Pardo, "Relative Plausibility and Its Critics," *International Journal of Evidence & Proof* 23 (2019): 5–59; Michael S. Pardo and Ronald J. Allen, "Juridical Proof and the Best Explanation," *Law and Philosophy* 27 (2008): 223–68.

21. MGs § 2.2.

22. The new MGs state that a merger increasing the Herfindahl-Hirschman Index (HHI) by more than 100 points to a post-merger HHI exceeding 1,800 "is presumed to substantially lessen competition or tend to create a monopoly." MGs § 2.1. This presumption can attach even when the two smallest firms propose to merge. An example is a market composed of seven firms with shares of 25, 20, 16, 14, 10, 8, and 7. The merger of the smallest firms would increase the HHI by 112 points to 1,802. United States v. Von's Grocery Co., 384 U.S. 270 (1966), generally is viewed as the high watermark of merger enforcement, but the merged firm in that case was the market leader. See United States v. Von's Grocery Co., 233 F. Supp. 976, 980 (S.D. Cal. 1964). The House report on the 1950 amendment to section 7 stressed that the bill would not "prohibit small corporations from merging in order to afford greater competition to large corporations." H.R. Rep. 81-1191, at 6–8 (1949). When a merger involves the smallest firms in a market, it makes more sense to presume efficiency, but not presuming anything makes the most sense.

23. See, e.g., FTC v. PPG Industries, Inc., 798 F.2d 1500, 1503 (D.C. Cir. 1986) (Bork, J.) (Supreme Court merger antitrust decisions rest "upon the theory that, where rivals are few, firms will be able to coordinate their behavior, either by overt collusion or implicit understanding, in order to restrict output and achieve profits above competitive levels.").

24. Separate developments destroyed the theoretical and empirical foundations of 1960s thinking about oligopoly. The theoretical foundation was the oligopoly theories of Edward Chamberlin and William Fellner, which were supplanted by the game theory revolution of the 1980s. At roughly the same time, the empirical foundation crumbled with advances in econometrics.

25. MGs § 2.3.B.

26. United States v. Marine Bancorporation, Inc., 418 U.S. 602, 625 (1974).

27. The new MGs cite the *Ford* and *Procter & Gamble* decisions. MGs § 2.6, nn.32–33, citing Ford Motor Co. v. United States, 405 U.S. 562, 571 (1972); FTC v. Proctor & Gamble Co., 386 U.S. 568, 577–78 (1967). The new MGs assert that the *Ford* decision condemned an "acquisition by dominant firm to obtain a foothold in another market when coupled with incentive to create and maintain barriers to entry into that market." MGs § 2.6, n.32. But Ford had less than 30 percent of the automobile market and was much smaller than General Motors. Ford sought to supply the spark plugs for its cars, just as Chrysler and General Motors did for their cars, and the Supreme Court saw self-supply of spark plugs as anticompetitive.