Responding to Developments in Economics and the Courts: Entry in the Merger Guidelines

Jonathan B. Baker^{†*}

The 1982 Merger Guidelines,¹ the anniversary of which we are celebrating today, were preceded by Merger Guidelines issued in 1968 by Assistant Attorney General Donald Turner.² My late father-in-law, Robert A. Hammond, who worked on the 1968 Guidelines at the Antitrust Division,³ once told me that the Justice Department drafting team thought about every major relevant Supreme Court antitrust decision and made sure that they could point to a sentence that encapsulated its holding. My immediate reaction, only partly facetious, was that if we were doing anything similar in drafting the 1992 Merger Guidelines,⁴ which I worked on while at the Antitrust Division, it was

[†] Copyright © 2002 by Jonathan B. Baker

^{*} Associate Professor of Law, Washington College of Law, American University. The author participated in drafting the 1992 Merger Guidelines (as Special Assistant to the Deputy Assistant Attorney General for Economics, Antitrust Division) and in drafting the 1997 efficiency revisions (as Director of the Bureau of Economics, Federal Trade Commission). He is grateful to Steve Brenner, Paul Denis, Andy Gavil, and Steve Salop for comments on an earlier draft.

¹ U.S. Department of Justice, Merger Guidelines (1982), *reprinted in* 4 Trade Reg. Rep (CCH), ¶ 13,102 [hereinafter 1982 Merger Guidelines].

² U.S. Department of Justice, Merger Guidelines (1968), *reprinted in* 4 Trade Reg. Rep (CCH), ¶ 13,101. Commissioner Thomas Leary gives Turner credit for "an act of considerable moral courage" in drafting guidelines that acknowledged some limits on government discretion at a time when the government seemingly could win any merger case it wanted. Thomas B. Leary, *The Essential Stability of Merger Policy in the United States*, 70 ANTITRUST L.J. __, __ (2002)(§II.A, text at n.17) (forthcoming).

³ Bob Hammond served as Director of Policy Planning (similar to Deputy Assistant Attorney General today) in the Antitrust Division from 1965 through mid-1968, when the 1968 Merger Guidelines were issued. In June 1968 he was appointed the equivalent of what is now termed Principal Deputy Assistant Attorney General by Assistant Attorney General Edwin M. Zimmerman. He left the Justice Department in August 1969 and spent most of his post-government career as an antitrust partner at Wilmer, Cutler & Pickering. Before becoming Director of Policy Planning, he had worked on mergers at the Federal Trade Commission, as Chief of that agency's Division of Mergers and as an assistant to Commissioner Philip Elman.

 $^{^4}$ U.S. Department of Justice and Federal Trade Commission Horizontal Merger Guidelines (1992), *reprinted in* 4 Trade Reg. Rep (CCH), ¶ 13,104 [hereinafter 1992 Merger Guidelines]. These Guidelines, as revised in 1997 with respect to efficiencies, remain in force today.

instead to encapsulate every major article on industrial organization economics published in the *American Economic Review*.

To be sure, times had changed over the intervening quarter century. The 1968 Merger Guidelines were issued on the heels of a wave of important Supreme Court merger decisions, including *Philadelphia National Bank*, ⁵ *Alcoa (Rome Cable)*, ⁶ *Continental Can*, ⁷ *Consolidated Foods*, ⁸ *Von's Grocery*, ⁹ *Pabst*, ¹⁰ and *Procter & Gamble*. ¹¹ By 1992, in contrast, the Supreme Court had been silent on merger enforcement for nearly two decades, ¹² while economists had been developing new ideas related to merger analysis generally, and the analysis of entry in particular. The game theory revolution in microeconomics was well underway, and economists had begun to look at entry deterrence in strategic terms, rather than in terms of barriers with height that could be assessed in the abstract. One important challenge facing the drafters revising the entry section in 1992 was thus to reconsider the old debate between "Bainian" and "Stiglerian" barriers to entry through the lens of these then-recent developments in economics.

⁵ *United States v. Philadelphia National Bank*, 374 U.S. 321 (1963) (creating presumption of anticompetitive effect based on market concentration).

⁶ United States v. Aluminum Co. of America, 377 U.S. 271 (1964) (Rome Cable).

⁷ United States v. Continental Can Co., 378 U.S. 441 (1964).

⁸ F.T.C. v. Consolidated Foods Corp. 380 U.S. 592 (1965) (highlighting reciprocal buying concerns in conglomerate mergers).

⁹ United States v. Von's Grocery Co., 384 U.S. 270 (1966).

¹⁰ United States v. Pabst Brewing Co., 384 U.S. 546 (1966).

¹¹ Federal Trade Commission v. Procter & Gamble Co., 386 U.S. 568, 578 (1967) (highlighting product extension and potential competition concerns with conglomerate mergers).

¹² The last major Supreme Court interpretation of Clayton Act section 7 remains *United States v. General Dynamics Corp.*, 415 U.S. 486 (1974). The Court issued substantive merger decisions in three bank cases shortly after *General Dynamics*, most recently in *United States v. Citizens & Southern National Bank*, 422 U.S. 86 (1975), but *General Dynamics* is generally treated as the last significant substantive Supreme Court decision in the area.

Although the drafters of the 1992 Merger Guidelines were not closely parsing Supreme Court opinions, they were also well aware of developments in the case law in the lower courts. Nowhere in that drafting project were the problems of steering between the demands of precedent and economic logic more difficult than in writing the section on entry. The Justice Department had just been on the losing side of two appellate decisions refusing to enjoin mergers on grounds of ease of entry, *Baker Hughes*¹³ and *Syufy*. Both appellate courts had sharply criticized the Justice Department's entry arguments and the Department's seeming lack of fidelity to the 1984 Merger Guidelines, which were then in force. The drafters of the 1992 Merger Guidelines understood the need to respond to these decisions by setting forth a method of analysis that would harmonize the Division's internal analytic approach to entry with the judiciary's concerns.

Sections A and B of this essay examine in turn the economic and legal challenges involving entry that government enforcers confronted during the early 1990s. Section C describes how the framework for entry analysis of the 1992 Merger Guidelines sought to deal with those challenges. Section D evaluates how well that framework has succeeded after a decade of experience. A brief concluding section sketches two unresolved issues that may become more salient.

¹³ United States v. Baker Hughes Inc., 908 F. 2d. 981 (D.C. Cir. 1990).

¹⁴ *United States v. Syufy Enters.*, 903 F.2d 659 (9th Cir.1990).

¹⁵U.S. Department of Justice, Merger Guidelines (1984), *reprinted in* 4 Trade Reg. Rep (CCH) ¶13,103 [hereinafter 1984 Merger Guidelines].

¹⁶ For another view of the state of play of entry analysis in the merger review process as of the time the 1992 Merger Guidelines were drafted, emphasizing the perspective of the F.T.C.'s economics staff, see Malcolm B. Coate & James Langefeld, *Entry Under the Merger Guidelines 1982-1992*, 38 ANTITRUST BULL. 557 (1993).

A. The Economic Debate about Conditions of Entry

1. <u>Bain vs. Stigler</u>

The antitrust analysis of new competition before the game theory era was dominated by the contrasting views of two pioneering industrial organization economists, Joe S. Bain and George Stigler, on defining "barriers to entry." In brief overview, Bain was interested in the effect of market structure on firm conduct and industry performance. He emphasized the way a range of structural factors created entry barriers, preventing new competition even when incumbents' prices exceeded competitive levels (so might be expected to attract entry). Bain's list of important entry barriers included absolute cost advantages of incumbents, product differentiation, and economies of scale (lower costs that arise when output and sales increase). ¹⁸

Stigler, too, was interested in the determinants of market concentration. But his approach to the question could be read as resisting the interventionist implications of Bain's analysis of entry barriers. Some of Stigler's fire was directed at the claim that high capital requirements could prevent new competition when incumbents were exercising market power.¹⁹ He questioned the once common appeal to "imperfections-in-the-capital-market" by asking whether even large capital

¹⁷ See generally Jansuz A. Ordover & Daniel M. Wall, A Practical Guide to the Economics of New Entry, 2 ANTITRUST 12 (1988); Gregory J. Werden, Network Effects and Conditions of Entry: Lessons from the Microsoft Case, 69 ANTITRUST L.J. 87, 97-100 (2001) (reviewing the economic literature on "barriers to entry"). Cf. Harold Demsetz, Barriers to Entry, AM. ECON. REV. 47 (1982) (questioning both Bain's and Stigler's definition); Richard J. Gilbert, Mobility Barriers and the Value of Incumbency, in Richard Schmalensee & Robert D. Willig, eds., 1 HANDBOOK OF INDUSTRIAL ORGANIZATION 475, 476-78 (1989) (defining a barrier to entry as a rent that is derived from incumbency).

¹⁸ Joe S. Bain, BARRIERS TO NEW COMPETITION (1956).

¹⁹ George Stigler, THE ORGANIZATION OF INDUSTRY 113-22 (1968).

requirements would stand in the way of a firm seeking to finance a reasonable entry plan, given the wide range of well-funded participants in financial and credit markets.²⁰

In analyzing entry, as elsewhere in Chicago school critiques of structural era antitrust,²¹ Stigler suggested that many practices previously thought harmful to competition in fact reflected healthy competition. He defined entry barriers as the additional long-run costs that must be incurred by an entrant relative to the long-run costs faced by incumbent firms.²² This definition might include the possibility, of great concern to Chicago school antitrust commentators, that entry would be prevented by regulation, patents, tariffs or other government action. But if incumbents obtained an advantage over entrants by being first to make expenditures that entrants would need to replicate in order to compete, or if the market could not support multiple firms at the scale needed to achieve low costs, those advantages should merely be seen as an appropriate reward that competition provides to the incumbent, who had the foresight or luck to enter first.

Stigler's definition of entry barriers thus excluded multiple factors that Bain had suggested might inhibit new competition when incumbent firms were charging prices above the competitive level. Scale economies would not count when entrants could, in principle, achieve comparably low

²⁰ Many modern commentators follow Stigler's lead in suggesting that capital markets generally work well enough so as to permit entrants to obtain financing for plausible entry plans without penalty relative to financing costs borne by incumbents. But others question whether financial markets invariably work this well, citing adverse selection and moral hazard problems endemic to capital markets that may limit the availability of capital and thus make it difficult for worthy firms to convince lenders of the promise of their entry plans. *E.g.* Joseph E. Stiglitz and Andrew Weiss, *Credit Rationing in Markets with Imperfect Information*, 71 AM. ECON. REV. 912 (1983). Capital market imperfections could, for example, make predatory pricing a viable strategy. Patrick Bolton, Joseph F. Brodley & Michael H. Riordan, *Predatory Pricing: Strategic Theory and Legal Policy*, 88 Geo. L. J. 2239, 2285-99 (2000).

²¹ See generally Jonathan B. Baker, A Preface to Post-Chicago Antitrust, in Roger van den Bergh, Roberto Pardolesi and Antonio Cucinotta, eds., POST CHICAGO DEVELOPMENTS IN ANTITRUST ANALYSIS (2002) (forthcoming) (describing the historical evolution of U.S. antitrust interpretation over three broad doctrinal eras).

²² George Stigler, THE ORGANIZATION OF INDUSTRY 67-70 (1968). Stigler's primary interest was not in analyzing mergers, but in explaining why a firm with a large market share is not necessarily exercising market power.

costs through internal growth. Product differentiation also would not count, unless the costs of advertising, product design or other means of achieving differentiation were higher for a new firm than for an incumbent firm. Accordingly, Stigler's perspective on entry barriers suggested a more permissive merger policy than did Bain's.

The debate between Bainian and Stilgerian perspectives on entry barriers provided a critical backdrop to the F.T.C.'s *Echlin* decision in 1985. The Commission majority noted that Stigler's definition of entry barriers was "widely accepted in the legal and economic communities." After all, the FTC majority explained, "low-cost incumbent firms can keep prices above the competitive level as long as those prices remain below the level that would provide an incentive to higher-cost potential entrants ... [erecting] a permanent barrier to new entry that would allow the maintenance of supracompetitive profits for an indefinite period of time." ²⁴

But if Stigler won the definitional battle in *Echlin*, Bain won the war.²⁵ The Commission majority did insist that absent a Stiglerian barrier, new firms would enter and drive prices down to competitive levels eventually. But they qualified severely the implication of that observation for merger policy. "From the standpoint of the public, however, it makes a great deal of difference whether this occurs sooner or later." Accordingly, the FTC majority also recognized, as a second type of entry difficulty, an "impediment to entry." An impediment was defined in Bainian terms, as

²³ *Echlin Mfg. Co.*, 105 F.T.C. 410, 485 (1985). The dissent contested the majority's characterization, noting that the Bain view remains an alternative providing a different perspective from "the current 'Chicago School' economic 'State Religion' approach to barriers to entry." *Id.* at 495 (Commissioner Baily, dissenting).

²⁴ *Id.* at 485-86.

²⁵ Similarly, the Areeda treatise expressly adopts the Bainian definition of entry barriers as the appropriate one for antitrust purposes. IIA Phillip E. Areeda, Herbert Hovenkamp & John L. Solow, Antitrust Law §420a, at 57-58 & 58 n.2, §420c, at 63-64 & 64 n.23 (2d ed. 2002).

²⁶ *Id.* at 486.

²⁷ *Id*.

"any condition that necessarily delays entry into a market for a significant period of time, and thus allows market power to be exercised in the interim." ²⁸

2. <u>Strategic Entry Deterrence</u>

During the decade before the FTC decided *Echlin*, economists had begun to look at entry deterrence in strategic terms.²⁹ This work focused on the significance of "sunk" costs, that is expenditures by entrants that could not be recouped in the event the firm were later to exit. If the fixed costs of entry are not sunk, and entrants have variable costs comparable to those of incumbents, the market is "contestable" and performs competitively regardless of market concentration among incumbent sellers.³⁰ But if entry requires sunk expenditures (irreversible investments), and incumbents would be expected to react quickly to cut price in response to entry, entry may be deterred even if the pre-entry price exceeds competitive levels. This may occur because the prospective entrant, recognizing the prospect of post-entry competition, will not expect to earn a contribution margin (revenues less variable costs) adequate to cover its own sunk costs.³¹

²⁸ *Id.* For example, the FTC majority explained, if a firm must build a new plant in order to compete, and the construction cannot be completed in less than a decade, the industry would be characterized by a high entry impediment. *Id.* at 487. *See also id.* at 495 (Some so-called impediments "resemble Bain's barriers to entry sent to the back of the classroom.") (Commissioner Bailey, dissenting).

²⁹ See generally Steven C. Salop, Strategic Entry Deterrence, 69 AM. ECON. REV. 335 (1979) (Papers and Proceedings, May); Richard J. Gilbert, Mobility Barriers and the Value of Incumbency, in 1 HANDBOOK OF INDUSTRIAL ORGANIZATION 475 (Richard Schmalensee & Robert D. Willig, eds., 1989).

³⁰ William J. Baumol, John C. Panzar & Robert D. Willig, Contestable Markets and the Theory of Industry Structure (1982).

³¹ Marius Schwartz & Robert J. Reynolds, *Contestable Markets: An Uprising in the Theory of Industry Structure: Comment*, 73 AM. ECON. REV. 488 (1983). The "slogan" resulting from this dynamic is that barriers to exit (irreversible investments anticipated by the prospective entrant) may create barriers to entry. Moreover, the incumbent's sunk investments may also play a role in deterring entry, by serving as a credible commitment to aggressive post-entry competition. Jansuz A. Ordover & Daniel M. Wall, *A Practical Guide to the Economics of New Entry*, 2 Antitrust 12, 15 (1988). In theory, indeed, even small sunk expenditures may be sufficient to protect incumbents' exercise of market power. Judith R. Gelman & Steven C. Salop, *Judo Economics: Capacity Limitation and Coupon Competition*, 14 Bell J. Econ. 315, 316 n.2 (1983) Joseph Stiglitz, *Technological*

The strategic approach to understanding entry conditions offered industrial organization economists a way to transcend the old debate between Bain and Stigler. It explained that high fixed expenditures by entrants could, under some circumstances, deter entry, even if the expenditures merely mimicked costs previously borne by incumbents. That might occur if fixed expenditures would also be sunk. The categories of fixed expenditures highlighted by Bain — including the product design and advertising expenditures that often underlie product differentiation, and the upfront costs of developing a large production facility — often are irreversible to a significant extent. That is, much of the brand reputation and product development costs may not be transferrable to another product were the first product not to succeed, and the plant and equipment used to produce a new product may have no other use, so would merely be sold as scrap in the event of exit. If so, the presence of these fixed (and sunk) expenditures may deter entry, as Bain supposed. But if the same fixed expenditures would not be sunk, entry would not be deterred, as those following Stigler suggested.

The drafting of the 1992 Merger Guidelines provided an opportunity to incorporate this new economic learning about entry. The economic logic of strategic entry deterrence lies behind the Guidelines analysis of the "likelihood" of entry.³² The entry likelihood section explains that a new competitor with an entry plan requiring significant sunk expenditures — a "committed" entrant³³ —

Change, Sunk Costs, and Competition, 1987 BROOKINGS PAPERS ON ECON. ACTIVITY 883. However, as will be seen, the courts and the drafters of the 1992 Guidelines act as if relatively small sunk costs create a relatively small entry deterrent. See Robert D. Willig, Merger Analysis, Industrial Organization Theory, and Merger Guidelines, 1991 BROOKINGS PAPERS ON ECON. ACTIVITY (MICROECONOMICS) 281, 310-11 (the smaller the minimum viable scale and the smaller the necessary sunk costs associated with that scale of entry, the more likely entry will cure or deter anticompetitive incumbent pricing). Cf. Gelman & Salop, 14 BELL J. ECON. at 316-19 (limited sunk expenditures may protect incumbent market power when entrants are content to stay small).

³² 1992 Merger Guidelines §3.3.

If a prospective entrant's sunk costs could not be recouped within one year of the commencement of its supply response, assuming a "small but significant and nontransitory" price increase above the prevailing prices in the relative market, the firm would be considered a "committed" entrant. 1992 Merger Guidelines §1.32. This test implies, as a rough rule of thumb, that an entry plan will be considered committed if the sunk costs of entry exceed 5% of the entrant's likely annual revenues. Janusz A. Ordover & Jonathan B. Baker, *Entry Analysis Under the*

would not find entry profitable if its output would be too large for the market to absorb without depressing prices further, considering the scale at which entry would take place and the likely sales opportunities available to the new competitor.³⁴ Moreover, those sales opportunities would be less if the incumbent firms had made prior sunk investments in excess production capacity, and in consequence would be expected to respond to new competition by expanding their own output, driving down the market price.³⁵

B. <u>The Challenge Posed by the Courts</u>

The 1992 Merger Guidelines were drafted in the immediate wake of two 1990 appeals court decisions, in *Baker Hughes* and *Syufy*, that together appeared to pose a fundamental challenge to the government's approach to entry analysis. I have told this story in detail elsewhere,³⁶ and so will merely sketch it here.

To understand the government's litigation problem, it is useful to begin with the 1982 Merger Guidelines. Those Guidelines recognized that easy entry trumps high concentration – that is, that a merger is unlikely to harm competition if entry is sufficiently easy, regardless of market concentration.³⁷ During the mid-1980s, the courts agreed, most importantly in the Second Circuit's

¹⁹⁹² Horizontal Merger Guidelines, 61 Antitrust. L.J. 139, 140 n.3 (1992).

³⁴ 1992 Merger Guidelines §3.3. The role played by the entrant's "minimum viable scale" in this analysis is considered further below.

³⁵ *Id*.

³⁶ Jonathan B. Baker, *The Problem with* Baker Hughes *and* Syufy: *On the Role of Entry in Merger Analysis*, 65 Antitrust L.J. 353 (1997).

³⁷ 1982 Merger Guidelines §III.B.

1984 decision in *Waste Management*.³⁸ These cases dealt with what the 1992 Guidelines term "uncommitted" entry, though the distinction between committed and uncommitted entry, while suggested by the economic literature on strategic entry deterrence, was as yet unknown to the courts.³⁹

Strategic considerations are not important when entry is uncommitted. Uncommitted entry is "hit and run:" any uncommitted entrant seeing a short term opportunity to profit by diverting output into a market would be expected to do so, even if that profit opportunity were likely to disappear shortly after entry. In consequence, the distinction between whether a firm *could* enter and whether it *would* enter is not important in analyzing uncommitted entry. But the economic literature on strategic entry deterrence makes entry likelihood (profitability) a central question with respect to committed entry: when entry requires significant sunk expenditures, a firm that could enter may find it unprofitable to do so for fear that post-entry competition would depress the price it would receive, leaving it unable to recover its sunk investments. The distinction between uncommitted and committed entry is important in understanding the problem created for the government's merger enforcement program by the Justice Department's litigation losses in *Baker Hughes* and *Syufy*. 40

³⁸ United States v. Waste Management, Inc., 743 F.2d 976, 978, 983-84 (2d. Cir. 1984). Accord, United States v. Calmar Inc., 612 F. Supp. 1298, 1306 (D.N.J. 1985); Echlin Mfg. Co., 105 F.T.C. 410, 479 (1985) (opinion of the Commission).

³⁹ The 1982 Merger Guidelines (and the similar 1984 Merger Guidelines) had incorporated a distinction between production substitution and entry based on the absolute cost and speed of entry. That distinction was a predecessor to the distinction made in the 1992 Merger Guidelines between uncommitted and committed entry, but it was rooted more in Bainian entry barrier thinking than strategic considerations. The 1992 Merger Guidelines reformulated the definitions to recognize the importance of sunk investments in creating strategic entry deterrence. *Compare* 1992 Merger Guidelines §1.32 (firms that participate in the relevant market through supply response) *with* 1982 Merger Guidelines §II.B.1 (production substitution).

⁴⁰ It may help newcomers to this terminology to think of committed entrants as having made commitments *to a particular relevant market* through their irreversible investments. In contrast, uncommitted entrants can switch production across markets cheaply and quickly.

Baker Hughes and *Syufy* both involved unsuccessful Justice Department challenges to mergers, where both the district court and the appellate court found for the merging firms on grounds of ease of entry. Both decisions were highly critical of government antitrust enforcers. The D.C. Circuit decision, *Baker Hughes*, "reads like an exasperated effort to rein in a runaway agency thought to have willfully ignored the teaching of *Waste Management*." The court rejected the government's contention that entry must be "quick and effective" to count, on the ground that this requirement overlooks the way potential competition never resulting in actual entry can nevertheless exert competitive pressure on a market. The Ninth Circuit, in *Syufy*, also employed strong rhetoric. The court suggested that it should have been obvious that entry was easy in the industry in which the merger occurred, and concluded that the government's position on entry was based on "a shopworn argument we had thought long abandoned: that efficient, aggressive competition is itself a structural barrier to entry." as

Both courts appear to have misunderstood what the government argued. In each case, the government made an entry likelihood argument rooted in the economic literature on strategic entry deterrence. In arguing for an injunction against the merger reviewed in *Baker Hughes*, the government highlighted facts suggesting that entry would require significant sunk investments to create a reputation for product quality and reliable future service, which could not be undertaken

⁴¹ Baker, *The Problem with* Baker Hughes *and* Syufy: *On the Role of Entry in Merger Analysis*, 65 Antitrust L.J. 353, 368 (1997).

⁴² Baker Hughes, 908 F.2d at 988. The court also rejected the "quick and effective" test on the ground that it could not be applied in practice without effectively, and inappropriately, imposing on defendants the burden of proving that entry actually will occur. *Id.* at 987.

Syufy, 903 F.2d at 667. The Syufy opinion, with its pointed comments about the dangers of aggressive antitrust enforcement "by government bureaucrats pursuing their notions of how the market should operate," *id.* at 673, could fairly be read, as two mainstream commentators described it when it was issued, as "exud[ing] antipathy for merger enforcement." Stephen Calkins & Frederick Warren-Boulton, The State of Antitrust in 1990, Paper Presented at Cato Institute Conference, A Century of Antitrust: The Lessons, The Challenges, Washington, D.C. (Apr. 1990).

quickly or profitably.⁴⁴ In *Syufy*, the Justice Department contended that entry at a scale large enough to achieve low costs would turn out to be unprofitable because entry at that scale would depress market prices.⁴⁵ While the government was making arguments about committed entry, however, that point was not understood by the courts. In both cases, the appeals court viewed the trial record as establishing that entry should be viewed as uncommitted (not involving significant time or sunk expenditures)⁴⁶ and easy. In each, in short, the court's exasperation with the government grew out of a misunderstanding: the court believed, incorrectly, that the Justice Department was ignoring *Waste Management* and its own Merger Guidelines⁴⁷ in refusing to accept that easy entry precluded the possibility of competitive harm from merger.⁴⁸

The resulting challenge for the drafters of the 1992 Merger Guidelines was to explain clearly the significance of the distinction between committed and uncommitted entry. If courts could not be convinced to make that distinction, they would not undertake to analyze the profitability of entry, and would instead wrongly limit their analysis to whether entry *could* occur. The Antitrust Division front office had worked out a new articulation in late 1989,⁴⁹ even before *Baker Hughes* and *Syufy* were

Jonathan B. Baker, *The Problem with* Baker Hughes *and* Syufy: *On the Role of Entry in Merger Analysis*, 65 Antitrust L.J. 353, 367 (1997) (analyzing Justice Department brief).

⁴⁵ Jonathan B. Baker, *The Problem with* Baker Hughes *and* Syufy: *On the Role of Entry in Merger Analysis*, 65 Antitrust L.J. 353, 369-7 (1997) (analyzing Justice Department brief and oral argument).

⁴⁶ 1992 Merger Guidelines §1.32. My use of the term "uncommitted" in this context is anachronistic. Although the term was not introduced until the 1992 Merger Guidelines, the concepts of committed and uncommitted entry were understood when these cases were litigated and highlighted by the government's entry argument.

⁴⁷ At the time these cases were decided, the Justice Department's 1984 Merger Guidelines, which were similar on entry to the 1982 Merger Guidelines, were in force.

⁴⁸ Jonathan B. Baker, *The Problem with* Baker Hughes *and* Syufy: *On the Role of Entry in Merger Analysis*, 65 Antitrust L.J. 353, 365-71 (1997).

⁴⁹ Address by Deputy Assistant General Judy Whalley, 29th Annual Antitrust Seminar, Practicing Law Institute 12 (Dec. 1, 1989). *See* Judy Whalley, Department of Justice Merger Enforcement, 57 ANTITRUST L.J. 109, 111-14 (1988) (Justice Department rejects Stiglerian entry barrier definition in favor of an analysis of whether entry would be timely, effective, and economically desirable).

decided. They discarded the "quick and effective" terminology rejected in *Baker Hughes* for the "timeliness, likelihood, and sufficiency" concepts that later appeared in the 1992 Merger Guidelines to test whether committed entry would counteract or deter a competitive problem.⁵⁰ But it was left to the Guidelines to spell out specifically how these concepts, particularly entry likelihood, would be assessed in practice.⁵¹

C. <u>Drafting the Entry Section</u>

The demands on the drafters of the entry section of the 1992 Merger Guidelines went beyond the need to resolve these economic and legal debates. One reason the 1982 Merger Guidelines had been so successful is that they were "fully specified."⁵² However difficult the Guidelines might be to

⁵⁰ 1992 Merger Guidelines §3 (Committed entry would prevent harm to competition from merger "if entry would be timely, likely, and sufficient in its magnitude, character and scope to deter or counteract the competitive effects of concern.") The similarity between the "quick and effective" language rejected in *Baker Hughes* and the "timely, likely, and sufficient" language of the 1992 Merger Guidelines could have created a litigation problem for the government, as "[a] court already persuaded that government enforcers are out of control could read this language as a direct challenge to judicial authority by unrepentant agencies." Jonathan B. Baker, *The Problem with* Baker Hughes *and* Syufy: *On the Role of Entry in Merger Analysis*, 65 Antitrust L.J. 353, 373 (1997). To date, however, this fear has not materialized.

⁵¹ The F.T.C. had begun to recognize the strategic entry deterrence logic in its case law before 1992. In *B.F. Goodrich Co.*, 110 F.T.C. 207 (1988), the Commission concluded that it was unlikely that an entrant could secure an efficient level of sales "without provoking a substantial response from incumbent firms, thereby driving prices to lower levels." *Id.* at 302. The F.T.C. also noted that the entry-deterring effects of scale economies are accentuated when the investment in new plant would be substantially sunk. *Id.* at 302. But strategic entry deterrence was not emphasized in the opinion, which focused on timeliness. *Cf.* Malcolm B. Coate & James Langefeld, *Entry Under the Merger Guidelines 1982-1992*, 38 ANTITRUST BULL. 557, 577 (1993)(as of 1992, strategic entry deterrence arguments were rarely addressed in the courts and even when they were, "the explanations appear incomplete").

William Blumenthal, *Clear Agency Guidelines: Lessons from 1982*, 68 ANTITRUST L. J. 5, 16 (2000). "Not only did the Guidelines fill in the interstices, but they filled in virtually *all* of the interstices — and generally not with abstract standards, but with numbers." *Id*.

apply in practice, they avoided conceptual ambiguities to the extent possible and they sought to maintain logical consistency.⁵³

With respect to uncommitted entry, the approach of the 1992 Merger Guidelines was similar to that taken in 1982 and reaffirmed in its essentials in 1984. All three sets of Guidelines include in the market firms that do not participate at current prices, but that could do so quickly and cheaply in the event prices were to rise slightly, and assign those firms a market share based upon the production capacity they would profitably divert into the market under such circumstances.⁵⁴ But it was more difficult to meet the goal of fully specifying the guidelines, and in particular, to solve the problem of ensuring logical consistency, when it came to setting forth an approach for assessing the likelihood of committed entry.⁵⁵

⁵³ The goals of fully specifying the Guidelines methodology and assuring its logical consistency in part reflect an economic theorist's aesthetic. These considerations were particularly important to the Deputy Assistant Attorney General for Economics, Robert D. Willig, who had been asked by Assistant Attorney General James Rill along with lawyer Paul Denis, Counselor to the Assistant Attorney General, to lead the drafting effort that led to the 1992 Merger Guidelines. (I served as Special Assistant to Willig and to his successor, Janusz Ordover. Willig and Denis asked me to work with them on producing a draft that would be consistent with Rill's broad policy charge. Many others at the Antitrust Division, the F.T.C., and outside the agency participated in reviewing and modifying the draft we produced.)

⁵⁴ Compare 1992 Merger Guidelines §1.32 (firms that participate in the relevant market through supply response) with 1982 Merger Guidelines §II.B.1 (production substitution) and 1984 Merger Guidelines §2.21 (same). See generally Janusz A. Ordover & Jonathan B. Baker, Entry Analysis Under the 1992 Horizontal Merger Guidelines, 61 Antitrust. L.J. 139, 140-41 (1992) (describing 1992 Merger Guidelines treatment of uncommitted entry). The 1992 Merger Guidelines refine the concept of production substitution, however, in light of the economic literature on strategic entry deterrence, by predicating the identification of uncommitted entry on the absence of significant sunk expenditures. See Robert D. Willig, Merger Analysis, Industrial Organization Theory, and Merger Guidelines, 1991 BROOKINGS PAPERS ON ECON. ACTIVITY (MICROECONOMICS) 281, 305-311 (interpreting the distinction between production substitution and entry in the 1984 Merger Guidelines in terms of game theoretic approaches involving sunk costs and commitment from industrial organization economics).

⁵⁵ The 1992 Merger Guidelines did not propose an elaborate analytical framework for the other two concepts in committed entry analysis, timeliness and sufficiency. Entry is considered timely only if significant market impact can be achieved within two years of initial planning, except that the period may be extended in a durable goods market where buyers may make investments to extend an existing product's useful life. 1992 Merger Guidelines §3.2. This is essentially "an intertemporal sufficiency requirement," as entry will not be sufficient if delayed. Janusz A. Ordover & Jonathan B. Baker, *Entry Analysis Under the 1992 Horizontal Merger Guidelines*, 61 Antitrust. L.J. 139, 145 n.23 (1992). Sufficiency comes into play if incumbents can limit entrant access to key assets required for entry, or if sales opportunities are localized within the market. 1992 Merger

In addressing the likelihood of committed entry, the drafters of the 1992 Merger Guidelines identified a logical consistency problem with the approach taken in 1982 and 1984. In economic theory, logical consistency is achieved by ensuring that a description of market outcomes is an equilibrium model. But the older approach could not be an equilibrium.⁵⁶ The earlier Guidelines had evaluated the profitability of entry assuming that the merger led to a small increase in price lasting for a substantial period of time.⁵⁷ Yet an entrant who makes significant irreversible investments, and thus plans to remain in the relevant market, does not evaluate the profitability of entry at an elevated price that might occur through the short-term exercise of market power before entry competes away that power. Rather, the committed entrant evaluates the profitability of entry at the long-run post-entry price, which is the price it expects to receive. It will thus consider the extent to which its entry, the concomitant addition to industry output, and the likely reaction of incumbents, will reduce the long-run post-entry price below a pre-entry price reflective of incumbent seller market power.

At what price should the profitability of committed entry be tested in merger analysis? The 1992 Merger Guidelines provided a then-novel and logically consistent answer. Committed entry is in for the long haul. If the committed entry solves the competitive problem, the post-merger price will quickly return to a level no higher than the pre-merger price. Thus, the prospective committed entrant must determine whether its entry plan would be profitable assuming it would receive no more than the *pre-merger* price, not an elevated price reflective of short-run market power.

But if entry at pre-merger prices would be profitable after the transaction, why would it not have been profitable before, leading the new firm to have entered already? The 1992 Merger

Guidelines §3.4.

⁵⁶ *Cf. Comments and Discussion*, 1991 BROOKINGS PAPERS ON ECON. ACTIVITY (MICROECONOMICS) 313, 314 (comment by Steven C. Salop explaining why "the theory of entry underlining the [1984] guidelines does not satisfy modern industrial organization theory").

⁵⁷ 1982 Merger Guidelines §III.B; 1984 Merger Guidelines §3.3.

Guidelines also answer this question.⁵⁸ The market after the merger is not the same as the market before: if the merger generates market power, price is higher and output lower than it was premerger, thus creating additional sales opportunities for an entrant beyond what had been available prior to the merger, and creating the possibility that entry may be profitable after the merger even if it had not been profitable before.

Will the additional sales opportunity resulting from a potentially anticompetitive merger be sufficient to make entry profitable? That depends on the extent to which the entry itself will depress price, by increasing market output directly and by inducing pricing and output responses from incumbent sellers. The 1992 Merger Guidelines provide a fully-specified method of assessing the profitability of entry under such circumstances. They compare an entrant's "minimum viable scale" – its break-even annual sales at pre-merger prices, ⁶⁰ often expressed as a fraction of industry annual sales – with an estimate of the sales opportunities facing the entrant after the merger. As a rule of thumb, the Guidelines suggest that an entry plan may not be plausible if the minimum viable scale exceeds 5 percent of total market sales. ⁶¹

See generally Robert D. Willig, Merger Analysis, Industrial Organization Theory, and Merger Guidelines, 1991 BROOKINGS PAPERS ON ECON. ACTIVITY (MICROECONOMICS) 281, 305-11. Although this article refers to the then-current 1984 Merger Guidelines, it was written by a primary author of the 1992 Merger Guidelines while the drafting of those later guidelines was well underway.

⁵⁹ The concept of minimum viable scale had been introduced in Steven C. Salop, *Measuring Ease of Entry*, 31 ANTITRUST BULL. 551 (1986). The 1992 Merger Guidelines adopted a slightly different definition.

⁶⁰ 1992 Merger Guidelines §3.3. All categories of costs are included in the analysis, including an appropriate rate of return on invested capital given that entry could fail and sunk costs would then be lost. The Guidelines further explain that "[t]he minimum viable scale of an entry alternative will be relatively large when the fixed costs of entry are largely sunk, when the marginal costs of production are high at low levels of output, and when a plant is underutilized for a long time because of delays in achieving market acceptance." 1992 Merger Guidelines §3.3 n.31.

⁶¹ 1992 Merger Guidelines §3.3. The 5% benchmark for sales opportunities is adjusted to account for factors like expected market demand growth or decline, the extent of vertical integration or forward contracting by incumbents, and the likely output response of incumbents in reaction to entry. *Id. Cf.* David T. Scheffman & Pablo T. Spiller, *Buyers' Strategies, Entry Barriers, and Competition*, 30 ECON. INQUIRY 418 (1992) (role of large buyers in creating sales opportunities for entrants); Gregory J. Werden & Luke M. Froeb, *The Entry-Inducing*

D. <u>Evaluating the Guidelines' Entry Framework</u>

How has the framework for entry analysis set forth in the 1992 Merger Guidelines fared over the following decade? Its greatest success has probably been in clarifying the relevant issues conceptually. The distinction between committed and uncommitted entry is a basic implication of the modern (strategic) microeconomic analysis of entry conditions. So, too, are the key economic ideas embedded in entry likelihood analysis: that new competition can be deterred by the prospect that price will fall with entry, and that incumbents can engineer such a situation by making commitments to post-entry competition.

The enforcement agencies no longer habitually lose merger challenges on grounds of ease of entry, ⁶² and this change of fortune may to some extent be attributed to the Guidelines' success in articulating the distinction between committed and uncommitted entry and explaining why the difference matters. Thus, the district court in *Cardinal Health* directly followed the 1992 Merger Guidelines by evaluating separately whether (committed) entry would be timely, likely, and sufficient to solve the competitive problem, concluding that it would not mainly on the ground of insufficiency. ⁶³ Similarly, in *Staples* the district court found a way to harmonize the entry analysis of *Baker Hughes*, which formally controls in the D.C. Circuit, with the standards of the 1992 Merger Guidelines by asking as the primary test whether new competition "would avert the merger's

Effects of Horizontal Mergers: An Exploratory Analysis, 46 J. INDUS. ECON. 525 (1998) (5% benchmark may be too high when the competitive effects theory is unilateral).

For example, merging firms' entry defenses were unsuccessful in *Federal Trade Commission v. Staples, Inc.*, 970 F. Supp. 970 F. Supp. 1066, 1086-87 (D.D.C. 1997) and *Federal Trade Commission v. Cardinal Health, Inc.*, 12 F. Supp. 2d 34, 54-58 (D.D.C. 1998). *But see United States v. Long Island Jewish Medical Center*, 983 F. Supp. 121, 149 (E.D.N.Y. 1997).

⁶³ Cardinal Health, 12 F. Supp. 34 at 54-58.

anticompetitive effects."⁶⁴ The use of "would" in preference to "could" in this articulation can be read as calling for a profitability analysis, as suggested by the Guidelines' entry likelihood test.

Another indicator of the success of the entry framework established in 1992 is its spread to doctrinal areas beyond mergers.⁶⁵ The enforcement agencies have themselves adapted entry standards from the Merger Guidelines to the context of analyzing agreements among rivals.⁶⁶ Some courts have done likewise, including the Ninth Circuit in *Rebel Oil*,⁶⁷ a monopolization case. That court recognized that entry, though easy for some firms, may be insufficient to solve a competitive problem "if the market is unable to correct itself despite the entry of small rivals" and cited the Merger Guidelines "timely, likely, and sufficient" language as persuasive authority for undertaking that analysis.⁶⁸

But the Guidelines' entry section has been criticized. F.T.C. Commissioner Thomas Leary recently raised two concerns that may be shared by others: that the agencies never find uncommitted

⁶⁴ Staples, 970 F. Supp. at 1086 (quoting Baker Hughes, 908 F.2d at 989).

⁶⁵ The Merger Guidelines contemplate a prospective analysis of competitive effects, consistent with the procedural posture of most merger investigations. The Guidelines ask whether entry would likely prevent harms to competition from occurring in the future. If a Sherman Act allegation involves a claim that harm to competition took place in the past, in contrast, a court evaluating entry would instead be expected to conduct a retrospective inquiry, as by examining whether past entry had fully counteracted the exercise of market power. But if the Sherman Act allegation involves prospective harm, the Guidelines analysis of entry could be applied directly.

⁶⁶ Federal Trade Commission and U.S. Department of Justice, *Antitrust Guidelines for Collaborations Among Competitors* §3.35 (2000), *reprinted in* 4 Trade Reg. Rep. (CCH) ¶13,161. Similarly, the Areeda treatise treats timeliness, likelihood and sufficiency of entry as general criteria for entry analysis, by implication not limited to the merger context. IIA Phillip E. Areeda, Herbert Hovenkamp & John L. Solow, Antitrust Law §422 (2d ed. 2002).

⁶⁷ Rebel Oil Co. v. Atlantic Richfield Co., 51 F.3d 1421 (9th Cir. 1995).

⁶⁸ *Id.* at 1440. Another example of a court relying on the entry framework from the 1992 Merger Guidelines outside the merger context comes from the recent district court decision in the government's Sherman Act case against Visa and MasterCard. *United Stats v. Visa U.S.A., Inc.*, 163 F. Supp. 2d 322, 342 (S.D.N.Y. 2001), *supplemented*, 183 F. Supp. 2d 613 (S.D.N.Y. 2001), *stay granted*, 2002-1 Trade Cas. (CCH) P 73,586 (S.D.N.Y. 2002), *appeal docketed*, No. 02-6074 (2d Cir. Apr. 2002).

entry, and that the methodology for evaluating committed entry is impractical given the limits of reasonably available information.⁶⁹ The first of these criticisms may actually reflect the Merger Guidelines' success in educating enforcement agency staff and outside counsel about the distinction between committed and uncommitted entry. When a merger takes place in a market in which entry requires little in the way of sunk investments or time, and the number of prospective entrants are not limited, the agency likely recognizes the situation right away and allows the merger to proceed without the need for an extensive investigation. It is unlikely, for example, that a merger among firms packaging into kits replacement parts used to tune-up automobile carburetors, the business at issue in *Echlin*, would draw a second request today.⁷⁰ Under such circumstances, it is unlikely that a current F.T.C. Commissioner would be asked to review personally an uncommitted entry case.

The second criticism, that the Guidelines's approach is impractical, appears aimed mainly at the Merger Guidelines' methodology for assessing entry likelihood. This criticism raises a fair issue, but it is important to put it into perspective. When the agencies conclude that committed entry would not solve the competitive problem from merger, they usually do so on grounds of untimeliness or insufficiency.⁷¹ Investigations that turn on entry likelihood are not common, and litigation over entry likelihood is rarer still.

Moreover, the Guidelines drafters were aware that mathematical precision in the application of concepts like "minimum viable scale" and "sales opportunities" would often prove elusive,

⁶⁹ Thomas B. Leary, *The Essential Stability of Merger Policy in the United States*, 70 ANTITRUST L.J. __, __ (2002)(§III.G)(forthcoming).

The enforcement agency would likely find, in a preliminary investigation obviating the need for a second request, that component manufacturing capability was not required to obtain the parts, kit assembly did not require much technological know-how, and brand loyalty was not an important factor in the sale of carburetor kits. *See Echlin*, 410 F.T.C. at 459 (initial decision, findings of fact 220-222).

⁷¹ Sufficiency of entry is often an important issue in evaluating whether new competition would solve a unilateral competitive effects problem arising from a merger among sellers of differentiated products. When competition is localized, an entrant's ability to deter or counteract a post-merger price rise will typically depend on the characteristics of its product or its geographic location.

notwithstanding the underlying conceptual rigor. That does not render the concepts useless. They still can focus the inquiry on the relevant factors that determine whether committed entry would be profitable in the post-merger market environment, and frame the qualitative testimony of those with actual entry experience in the industry.⁷² Indeed, in my experience, this is how the entry likelihood approach has been employed in those few investigations in which the profitability of committed entry is central, regardless of whether quantitative evidence is available.⁷³

In any case, there may be no good alternative to the entry likelihood methodology of the 1992 Merger Guidelines. Commissioner Leary suggests that the agencies apply a test based on the history of entry and whether special circumstances affect the predictive value of that history.⁷⁴ But evidence that entry has occurred in the past may be double-edged, consistent with either low entry barriers in the past (which permitted it) or the past exercise of market power (which induced it).⁷⁵ Similarly, the absence of past entry could be consistent either with a competitive market or entry barriers.⁷⁶

⁷² For example, "[i]ndustry witnesses who believe an entrant would need a minimum market share to break even post-merger can be asked to explain why the share is so low or high. Such witnesses can also discuss the extent of the price depression that could be expected to follow entry at a particular scale." Janusz A. Ordover & Jonathan B. Baker, *Entry Analysis Under the 1992 Horizontal Merger Guidelines*, 61 ANTITRUST. L.J. 139, 145 (1992).

⁷³ For example, in one investigation conducted when I was Director of the F.T.C.'s Bureau of Economics, an effort to quantify minimum viable scale led the staff economist to identify the importance of understanding limitations on prospective entrant production capacity. This issue then became a focus of the investigation.

Thomas B. Leary, *The Essential Stability of Merger Policy in the United States*, 70 ANTITRUST L.J. __, __ (2002)(at §III.G n.70)(forthcoming).

Ordover and Wall argue that if the market has experienced "a reasonable amount" of entry and exit in response to market signals like price fluctuations or changes in cost, then "the plausible inference can usually be made that conditions of entry and exit do not unduly favor incumbent firms over potential entrants." Jansuz A. Ordover & Daniel M. Wall, A Practical Guide to the Economics of New Entry, 2 ANTITRUST 12, 13 (1988). But they also note that entry under such conditions "does not necessarily prove the absence of barriers" because the market may not be behaving competitively, "thus creating opportunities for entrants that should not be there." *Id.*

⁷⁶ *Id.* at 13-14.; *Cardinal Health*, 12 F. Supp. 34 at 57.

Accordingly, if the implications of past entry history are assessed responsibly, doing so will almost necessarily lead to the analytic approach of the 1992 Merger Guidelines. The Guidelines explain that recent examples of entry, whether successful or unsuccessful, may provide a useful starting point for identifying the necessary actions, time requirements, and characteristics of possible entry alternatives. But past entry evidence must be analyzed with care to ensure that it is probative. Can entrants today employ the same approaches as had been successful in the past? Can they do so as cheaply as did the entrants? Would entrants today reasonably expect to receive as high a price as did their predecessors, who may have entered when there was less post-entry competition or the market was larger? As these questions suggest, careful analysis of the probative value of past examples of committed entry will quickly turn into an entry likelihood analysis, along Merger Guidelines lines.

E. Two Unresolved Issues

The 1992 Merger Guidelines framework for entry analysis continues to embody the best current economic thinking. Still, two unresolved issues in its application may increase in salience. The first is an economic question not fully addressed in 1992. If entry is deterred by the prospect of post-entry competition, it is important to understand how aggressively market participants would compete in the event a new firm were to enter. The 1992 Merger Guidelines recognize this point, treating the issue as a reason that the "sales opportunities" facing the entrant may be larger or smaller than 5 percent of total market sales, the benchmark against which an estimate of minimum viable scale

⁷⁷ 1992 Merger Guidelines §3.1.

For example, in monopolization cases, where the alleged harm to competition is more often retrospective than in merger analysis, it may be possible to test the extent of past entry successes and any accompanying price reductions for consistency with the plaintiff's allegations. *See*, *e.g. Tops Markets, Inc. v. Quality Markets, Inc.*, 142 F.3d 90, 99 (2d Cir. 1998) (inferring ease of entry inconsistent with monopolization allegation from prior examples of firms entering with seemingly little difficulty).

is tested in entry likelihood analysis.⁷⁹ But the Guidelines offer no guide for thinking about how to adjust sales opportunities for the likely output response of incumbents in reaction to merger and entry, perhaps of necessity because the issue is closely related to the analysis of the likely competitive effects of the transaction.⁸⁰

The second unresolved issue is a legal question involving burdens of proof. The Merger Guidelines disclaim allocation of burdens; they describe an analytic framework adopted by the enforcement agencies, not a legal framework that should be employed by a court.⁸¹ But the Guidelines have informed the case law, even in non-merger litigation.⁸² Courts applying the *Philadelphia National Bank*⁸³ presumption of anticompetitive effect from market concentration generally address entry as a rebuttal factor, designed to respond to the government's showing of concentration.⁸⁴ This approach clearly places a burden of production on defendant, but it may or may not place on defendant the burden of persuasion to prove that entry would solve a competitive problem arising from an acquisition.⁸⁵ This issue awaits clarification in further litigation.

⁷⁹ 1992 Merger Guidelines §3.3.

⁸⁰ For example: if the competitive effects theory is coordinated, would the entrant be expected to join the cartel or undermine it? If the competitive effects theory is unilateral, would the pre-merger oligopoly interaction (such as Bertrand-Nash or Cournot-Nash conduct) be expected to change following merger and entry? Nor do the Guidelines articulate a way to adjust sales opportunities for the other relevant factors they note, including expected demand growth or decline, the exclusionary effect of vertical integration or forward contracting by incumbents, or entrants ability securely to divert sales from incumbents through forward contracting with buyers.

⁸¹ 1992 Merger Guidelines §0.1.

⁸² See supra notes 62-68 and accompanying text.

⁸³ United States v. Philadelphia National Bank, 374 U.S. 321 (1963).

⁸⁴ E.g. United States v. Waste Management, Inc., 743 F.2d 976 (2d. Cir. 1984); United States v. Baker Hughes Inc., 908 F. 2d. 981 (D.C. Cir. 1990).

⁸⁵ For example, the Areeda treatise concludes that "[t]he cases are generally, but not absolutely, consistent" with its recommendation that courts shift the burden to the defendant "to show that entry will dissipate any likely anticompetitive effects" in certain situations placing "very strong claims for reassignment of the burden with respect to entry barriers" including mergers to monopoly, a dominant firm's acquisition of a nascent rival,

and mergers raising concentration substantially and to high levels. IIA Phillip E. Areeda, Herbert Hovenkamp & John L. Solow, Antitrust Law §941h (2d ed. 2002). The treatise does not distinguish sharply between burdens of persuasion and production, however, and could be read to suggest that both be assigned to defendant under these circumstances but not always.