John Kwoka, *Eliminating Potential Competition*, *in* 2 ISSUES IN COMPETITION LAW AND POLICY 1437 (ABA Section of Antitrust Law 2008)

Chapter 60

ELIMINATING POTENTIAL COMPETITION

John Kwoka*

Mergers that eliminate a potential competitor to a market are rarely subject to challenge in current U.S. antitrust policy. This chapter evaluates the economics of potential competition from both a theoretical and empirical point of view and finds much support for a policy that treats mergers involving potential competitors in a similar fashion as mergers between incumbent firms. It then discusses the origins for this more lenient treatment of potential competition mergers in U.S. antitrust policy and the more aggressive approach taken by other countries. Based on the economics, the chapter suggests reconsideration of current U.S. treatment and offers an analytical method consistent with the underlying economics that would seem to satisfy judicial concerns.

1. Introduction

The importance of potential competition as a constraint on market power has been recognized in the industrial organization literature at least since work by Joe S. Bain in the late 1950s.[1] Economic theory now recognizes the effect that firms not currently producing in an industry may have on market price performance, and there is considerable empirical evidence confirming that relationship. One reflection of that understanding is current U.S. merger policy, where entry conditions and concentration among incumbent firms are now coequal factors used to determine competitive effects. Specifically, a merger or acquisition between firms in a concentrated market may be permitted if the prospect for entry into the market can be shown to be timely, likely, and sufficient to restore the premerger degree of competition.

In light of this acknowledgment of the effect of potential competition, it is ironic that current U.S. merger policy treats a merger between an incumbent firm and a potential entrant that imposes a competitive constraint entirely differently. Rather than being challenged on the grounds that such a merger eliminates a potential competitor, such a merger is now more likely to be approved than ever before. If concern is expressed about potential entry at all, it is, at best, secondary to other issues raised in a merger investigation. Given current economic understanding, the relegation of the doctrine of potential competition to secondary status raises some important questions. These include why this doctrine has evolved so differently from the analytically similar issues

* Northeastern University. The author thanks Dale Collins, Larry White, and seminar participants at the College of Europe (Warsaw), the Netherlands Competition Authority, and the U.K. Competition Commission for helpful comments on this paper. The author also acknowledges Luke Froeb and Randy Tritell of the Federal Trade Commission for their helpful suggestions, as well as the following individuals who provided information on competition policy in their countries: Andreas Bardong (Germany), Terence Stechysin (Canada), Geoff Thorn (New Zealand), and Tetsuji Yokote (Japan). Gratitude is expressed to Evgenia Shumilkina for excellent research assistance.

1. JOE S. BAIN, BARRIERS TO NEW COMPETITION (1956).

regarding entry conditions, and also whether the doctrine should be reconsidered and perhaps incorporated into analyses of the competitive effects of mergers.

This chapter addresses the current status of the doctrine of potential competition. Section 2 evaluates the economic basis for the doctrine. It distinguishes two threads that follow from the underlying economics, and explains the events that have caused the doctrine to fade in policy importance. Section 3 contrasts the ever more persuasive economics of potential competition and the ever less persuaded judiciary in the United States and discusses the much greater importance placed on the doctrine in other countries. Section 4 discusses the policy consequences of current attitudes toward potential competition in the United States and offers for consideration the outline of an operational policy that is consistent with underlying economics. Section 5 concludes this chapter.

2. A primer on the economics of potential competition

This section examines from an economic perspective the circumstances under which the elimination of a potential competitor by merger or acquisition raises competitive concerns. The terms "merger," "acquisition," and "elimination" should be interpreted interchangeably, since the policy issues do not generally depend upon the exact mechanism by which the potential entrant is eliminated. The discussion of the underlying economics begins with a review of theoretical models of pricing for their implications regarding the competitive effect of potential competitors, and then examines empirical evidence on the actual effects of potential entry on market performance. The focus of this review throughout is on operational guidance for policy.

As an initial matter, there are two quite different versions of the doctrine of potential competition. The first involves the case where the nonincumbent is perceived to be a possible entrant and, as such, constrains the behavior of incumbent firms. The elimination of that potential competitor confers greater pricing discretion on incumbents, regardless of whether the firm actually would or might have entered. The second version of the doctrine entails a firm that objectively is likely to enter the market, even if it is not so perceived by the incumbent firms. The elimination of this potential entrant by merger with an incumbent firm prevents future entry that would have led to deconcentration of the market and the strengthening of competition.

The nonincumbent firm described by the former case has traditionally been called a "perceived potential competitor," and the latter has been called an "actual potential competitor." The awkward nature of these labels has led to suggested alternative terminology that focuses on the effect of the potential competitor on the market. The nonincumbent firm that is perceived to be a constraint is thus termed a "constraining competitor," and the nonincumbent firm that would objectively have entered is a "prospective competitor."[2] This chapter will use these latter terms throughout, and where analogies to other discussions—especially court opinions—are necessary, it shall note the corresponding traditional labels. "Potential competition" will refer to both constraining and prospective competition.

---

2. John E. Kwoka, *Non-Incumbent Competition: Mergers Involving Constraining and Prospective Competitors*, 52 CASE W. RES. L. REV. 173, 174 (2001).

Economic foundations for both types of potential competition can be found in the theoretical literature on market price determination, and also in empirical literature examining the actual effects of nonincumbents on pricing. These two strands of the literature are discussed in the next sections.

2.1. The theoretical role of potential competitors

Economic models of price/output determination and entry deterrence are familiar. This chapter puts these familiar economic models to an unfamiliar use: to derive implications regarding the circumstances under which the elimination of a potential competitor by merger or acquisition adversely affects market operation. This section first reviews the Bertrand and Cournot[3] models and then considers models of entry deterrence. At each stage of the discussion, propositions are developed concerning the effect of the elimination of potential competition on market price and performance.

Propositions derived from the Bertrand model. In the basic Bertrand model, two or more firms sell a homogeneous product that is produced with constant and identical marginal cost. Competition in prices involves each firm undercutting the price set by the other until an equilibrium is achieved where price equals marginal cost. In this model, incumbent competition is sufficiently strong such that the existence of one or more potential entrants with the same unit cost is irrelevant to price determination. From this scenario, the following proposition concerning the elimination of potential competition can be developed:

> *Proposition 1:* If incumbent competition is sufficiently strong, potential entrants with the same costs do not constrain price determination. Accordingly, the elimination of any one or more such potential competitors by merger raises no competitive concern, cet. par.

Proposition 1 holds true not only in the case of Bertrand competition but to varying degrees also for markets more generally. On the other hand, variations in the assumptions of this simple case can modify its implications, as shown in the following four alternative cases.

First, suppose that incumbent firms face binding capacity constraints, and thus market price is determined by aggregate capacity and market demand. Under this circumstance, a potential competitor cannot alter current market price because that price reflects scarcity rents rather than monopoly markup. However, when it actually enters, a potential competitor that adds to total capacity will alter equilibrium price. This scenario suggests the following proposition:

> *Proposition 2:* In the case of Bertrand competition, if price determination is subject to binding capacities, then the elimination of a nonincumbent alters equilibrium price by eliminating a capacity increasing entrant.

A second variation on Bertrand competition examines the case where the incumbents have different marginal costs. Suppose the different marginal costs are given by the following ordered series: $c_1 < c_2 , c_3 , ... < c_n$. In equilibrium, firm 1, with the lowest

---

3. Good discussions of these and related models can be found in JEFFREY R. CHURCH & ROGER WARE, INDUSTRIAL ORGANIZATION: A STRATEGIC APPROACH (2000).

unit cost, chooses $P_1 = c_2 - \varepsilon$ (that is, a price just slightly less than the next higher cost), which price forces firm 2 and all others from the market. However, firm 1 remains constrained by the threat of entry and renewed production by firm 2, so that a merger between those two firms would have the effect of permitting the merged entity to raise price to $P_1 = c_3 - \varepsilon$ (that is, just below the marginal cost of the next lowest cost firm). This variation on the Bertrand model establishes the following proposition concerning the elimination of potential competition:

> *Proposition 3:* In Bertrand competition with cost differences, the elimination of a nonincumbent firm matters if that firm has the next lowest (or even lower) cost relative to the incumbent. However, if there are two or more incumbent firms with the same costs, or two or more potential competitors with the same next lowest cost, then the loss of a potential competitor does not relax any pricing constraint.

Third, suppose that it is the potential competitor that has the lowest costs. In this case Bertrand competition strictly among incumbents results in a higher price than when the incumbents are constrained by the threat of entry by the lower cost nonincumbent firm. Consequently, the elimination of the nonincumbent firm by merger or acquisition relaxes the constraint and allows incumbents to establish a higher market price. From these considerations, this proposition follows:

> *Proposition 4:* In Bertrand competition, the elimination of a lower cost nonincumbent firm relaxes the constraint on competition among incumbents and alters equilibrium market price. Market price settles at the cost of the lowest cost incumbent, higher than the costs of the nonincumbent firm.

A fourth variation on Bertrand pricing concerns differentiated products. In this scenario, the effect of a potential entrant depends upon parameters of the relevant demand functions, in particular, on the prospective cross elasticities of the particular product with existing products. To the extent these cross elasticities are strong, the demand curves perceived by incumbent firms are more elastic and their pricing discretion less. The elimination of a strongly cross elastic prospective competitor will therefore significantly affect market performance, and leads to the following proposition:

> *Proposition 5:* With differentiated-product Bertrand competition, the elimination of a potential competitor by merger with an incumbent will relax the competitive constraint on incumbent behavior. This effect is greater to the extent that the cross elasticity with particular respect to the merging incumbent firm is high, costs are symmetric, and the number of firms is few.

Propositions derived from the Cournot model. The Bertrand model is most appropriate for markets where competition focuses on price and where products are differentiated. The other standard model in the economic literature, the Cournot model, supposes in its simplest form a homogeneous product, constant and identical marginal cost, and quantity competition among some number of identical incumbents. Each firm assumes the others will maintain their output, so that each firm produces and sells to its residual demand curve. The result is market output, price, and total profit that fall between the competitive and monopoly levels, depending on the number of firms. From

this observation it is often inferred that a merger is equivalent to a simple reduction in the number of incumbent firms. As has been pointed out by Salant, Switzer, and Reynolds,[4] this inference overlooks the fact that the merger might not raise the profit of the merged entity itself, in which case the merger presumably would not occur at all. Variations on the standard assumptions, however, recreate the potential of mergers to raise participants' profits.[5]

In most Cournot models, positive profit does induce entry, resulting in expanded output but lowered price and profitability. Thus, the elimination of the nonincumbent Cournot firm via merger prevents a procompetitive change from occurring, and leads to the following proposition:

> *Proposition 6:* In Cournot quantity competition, the elimination of an identical potential competitor by merger with an existing firm causes competitive harm by preventing prospective entry that would increase output. This effect is similar to the merger of two existing Cournot competitors.

An important variation on the basic Cournot model arises when there are cost differences among the firms. Such cost differences affect equilibrium outputs of all firms but, unlike in the case of Bertrand competition, do not generally threaten their viability. The effect of a merger between an incumbent and a potential competitor depends upon the particular configuration of their costs and includes the possibility of some efficiency gains from reorganizing production. The broad outlines of the effects can be stated as follows:

> *Proposition 7:* Where Cournot firms have different costs, the merger of a potential competitor and an incumbent firm involves the elimination of prospective competition as outlined in Proposition 5, but also the possible displacement of high cost production with low cost output.

The effect of uncertainty in the Bertrand and Cournot models. To this point, the discussion has assumed the absence of uncertainty and the absence of fixed costs. Relaxation of either assumption may change certain implications. For example, in Bertrand models, if it is uncertain that one of two equally low cost Bertrand competitors will survive, then the elimination of a next lowest cost potential competitor through merger with the incumbent that is most likely to survive may have anticompetitive effects. The same rule holds in the circumstance where the survival of one of two equally and next lowest cost potential entrants is uncertain, and the other potential entrant is eliminated by merger with the sole incumbent firm.

In Cournot, all firms matter to some degree, and so the introduction of uncertainty alters, but does not reverse, any conclusions concerning the relative importance of certain competition-eliminating mergers. For example, if the rival that is acquired and shut down has uncertain long-term prospects even in the absence of the merger, then the

---

4. Stephen Salant, Sheldon Switzer & Robert Reynolds, *Losses from Horizontal Mergers: The Effects of an Exogenous Change in Industry Structure on Cournot-Nash Equilibrium*, 98 Q.J. ECON. 185 (1983).
5. *See, e.g.*, John Kwoka, *The Private Profitability of Horizontal Mergers with Non-Cournot and Maverick Behavior*, 7 INT'L J. INDUS. ORG. 403 (1989); Joseph Farrell & Carl Shapiro, *Horizontal Mergers: An Equilibrium Analysis*, 80 AM. ECON. REV. 107 (1989).

expected effects of the acquisition are correspondingly more modest. In this case, of course, the presence of the nonincumbent has a weaker procompetitive effect. Accordingly, the following generalization applies:

> *Proposition 8:* Where there is uncertainty about the viability or persistence of either the incumbent firms or the potential competitors, previous results change in degree only. These changes are most likely in the case of Bertrand competition.

The role of fixed costs in the Bertrand and Cournot models. Incorporating fixed costs adds realism to the modeling but again may alter some previous conclusions in the process. In a Cournot environment, for example, fixed costs limit the number of viable incumbents, so that in symmetric equilibrium a potential competitor is not in a position to threaten credibly to enter. Hence, competitive risk from the elimination of a potential competitor arises primarily in the circumstance when costs or technology change so as to permit additional entry. On the other hand, Bertrand competition with fixed costs still results in a single firm, but long-run price now must cover the fixed costs. The implications for entry, and the consequences of the elimination of a potential entrant, are largely unchanged. Thus, the following proposition is true:

> *Proposition 9:* With fixed costs and Bertrand competition, price differs but the same propositions regarding potential competition apply. In Cournot quantity competition, fixed costs limit the number of firms so that a potential competitor is significant only if it has cost or technology advantages.

Explicit entry deterrence models. The economics literature also contains many explicit models of entry deterrence, that is, where the incumbent takes action specifically to forestall or limit threatened entry. This section considers the implications of these models in the case of a merger between an incumbent firm and a potential competitor. These implications differ from those derived using the Bertrand and Cournot models because explicit entry deterrence by its nature involves prior, and generally costly, acts by the incumbent to forestall threatened entry.

The effect of explicit entry deterrence on potential competition can best be analyzed using two models: the traditional Bain-Sylos-Modigliani (BSM) model[6] and the more recently developed Dixit model.[7] The traditional BSM model explains how an incumbent firm can determine the highest price that it can charge without inducing profitable entry. The mechanism is that the incumbent chooses an output (and equivalent price) that leaves too little of the market to be served profitably by any entrant. In the presence of scale economies, this "limit price" permits profits to the incumbent firm that are smaller than unconstrained monopoly profits but will persist over time without entry. The traditional BSM model therefore supports the following proposition:

> *Proposition 10:* In the presence of scale economies and output-based entry deterrence by the incumbent, merger with the sole potential entrant may eliminate a competitive constraint. If there are multiple identical potential competitors, the elimination of any single one will not raise competitive concerns.

---

6. This model is described in CHURCH & WARE, *supra* note 3, at ch. 13.
7. Avinash K. Dixit, *The Role of Investment in Entry Deterrence*, 90 ECON. J. 95 (1980).

This traditional model is logically flawed since its strategy of holding output constant is not generally rational for the incumbent in the face of actual entry. The incumbent's profit is typically larger when it accommodates the new competitor by reducing its own (and hence industry) output. Knowing this, of course, the potential competitor will in fact not be deterred by the noncredible threat of price/output maintenance. In that case, the rational incumbent would not pursue such a strategy in the first place. Despite this shortcoming, the insights of the traditional BSM model are common to a variety of models of entry deterrence: in any model where a nonincumbent firm constrains incumbents' pricing to any degree, the elimination of the nonincumbent relaxes that constraint and raises competitive concern.

Modern approaches to entry deterrence focus exclusively on credible strategies, where credibility requires the use of a strategic variable that is irreversible due to sunk costs. Appropriately, sunk costs make it irrational for the incumbent to reverse its behavior postentry. Strategic investments in product variants, location, R&D expenditures, and capacity have much stronger irreversibility properties than do price and output. Models involving all of these and other strategies have been developed, but since the essence of most models are similar, this section examines only an early version of the Dixit model that demonstrates the use of capacity as a credible entry deterring strategy.

The Dixit model assumes a single incumbent firm facing possible entry from a potential competitor. The incumbent moves first. Its strategic weapon is capacity investment that lowers its marginal cost of output expansion, making credible the threat of postentry output expansion (or at least output maintenance) since it is no longer profit maximizing to contract output in the face of actual entry. Now, although the incumbent incurs some added costs from such capacity expansion, the nonincumbent will decide not to enter. Thus, the incumbent frees itself of the constraint imposed by the potential entrant.

In this context, a merger between the incumbent firm and the potential competitor clearly removes a competitive constraint and raises the usual concerns outlined above. But merger also avoids the need to undertake entry deterring actions, which are costly but do not confer commensurate social benefits. (This last statement must be true since if the social benefits were commensurate with their costs, then the incumbent would have undertaken the costs even in the absence of threatened entry.) The possibility of some efficiencies therefore arises, leading to the following proposition about the effect of explicit entry deterrence on potential competition:

> *Proposition 11:* In Dixit-like models of strategic entry deterrence, the elimination of the potential competitor by merger with the incumbent relaxes the competitive restraint that the potential entrant poses but otherwise has ambiguous effects on market efficiency. Anticompetitive effects are likely to dominate when the fixed costs are smaller (since less is saved by eliminating the potential entrant) and when the incumbent's output increase in the capacity-altered state is small.

Summary of the propositions on the elimination of potential competition. The propositions set forth in this review may be summarized as follows: Except when incumbent competition is strong or potential competitors are numerous, the elimination

of a potential competitor or potential competitors by merger is likely to relax the competitive constraint and thereby permit greater pricing discretion by incumbents. Alternatively, such an elimination may prevent actual entry by a prospective competitor and thereby may prevent deconcentration of the industry. Either outcome entails competitive harms. These statements may require some qualification in cases where there is uncertainty about the viability or persistence of either the incumbent firms or the potential competitors, or where costs differ among firms, although most theoretical cases continue to suggest competitive concerns.

2.2. Evidence on the role of potential competition

The effect of potential competition on incumbent firm behavior and performance has also been examined in the empirical literature, although no study examines actual mergers between incumbent firms and potential competitors. In this respect, the literature is not that different from that on mergers between actual competitors, where there are very few studies of actual effects. Rather, the methodology in the literature has tended to involve measurement of the constraining effect of potential competitors on price determination among incumbent firms in a market. From this constraining effect, one might in principle infer the effect of the elimination of a nonincumbent, although in practice any inference is subject to two possible limitations:

- The inherent difficulty of identifying potential competitors and characterizing their strength. As will be shown, however, there are circumstances in which this problem can be surmounted.
- The imperfect analogy between presence or absence of a potential competitor and its elimination by merger with an incumbent. In the latter case, assets are likely to remain in the industry and help sustain production.

Despite these limitations, there is much to be learned from empirical research on nonincumbent competition. The present discussion is facilitated by the availability of two recent summaries of the relevant empirical literature. Kwoka focuses on numerous studies of potential competition in the airline and rail industries, while Mats A. Bergman reviews those in pharmaceuticals.[8] As described in those two reviews, empirical testing of the effect of potential competition generally involves adaptations of fairly standard models of price determination, as for example:

$$\text{Price} = f(PC, Conc, X)$$

In this expression, *PC* is the measure of potential competition, as discussed below. *Conc* captures concentration among incumbent firms, typically measured by the concentration ratio or the Herfindahl index, and *X* is a set of control variables such as entry and demand conditions.

Empirical studies of the airline industry. In airlines, identification of potential competitors is more straightforward than in most other industries. While the theory of contestable markets suggests that all carriers not presently serving a city-pair market

8. Kwoka, *supra* note 2, at 193-97; Mats A. Bergman, Potential Competition: Theory, Empirical Evidence, and Legal Practice (Swedish Competition Authority, Working Paper, 2002).

might instantaneously enter, more realistically feed traffic and route-specific knowledge and infrastructure (such as gates) are crucial in making entry into a route likely. Potential entrants are therefore usually defined as those that, while not operating on the route, are serving either endpoint. Since by definition such firms do not participate in the relevant market, the number of potential competitors is usually measured by a simple count of such firms, or sometimes a count of those firms that meet some small size-threshold.

In Kwoka's review of 12 studies of airlines, the results corroborate the theoretical prediction that potential competition is likely to affect the behavior and performance of the market. The coefficients on the potential competition variable are statistically significant in all but two of the studies, and their magnitudes suggest a nontrivial effect. The nature of these results is nicely illustrated by a typical study of this sort. Morrison and Winston examine 769 city-pair airline markets that existed in 1983 and estimate a pricing model using incumbent firm concentration, other control variables, and a count of potential competitors.[9] They find that each additional potential competitor lowers current price by a statistically significant amount, approximately one-third as much as that due to one additional actual competitor.[10] The Kwoka review of studies such as Morrison and Winston's forms the basis for the following finding concerning the impact of potential competition:

> *Finding 1:* In airlines, most studies find a substantial and significant effect on fares from the existence of one or more other carriers positioned to enter.

Empirical studies of the railroad industry. In railroads, potential competition is defined in terms of carriers offering interline service, that is, carriers serving one portion of a monopoly route that are in a position to enter full service most quickly and cheaply. Clearly, entry into railroads occurs at far higher cost and longer time delay than in the case of airlines. Two studies make the following finding concerning the impact of potential competition:

> *Finding 2:* In railroads, studies find a substantial and significant effect on rates along an entire route from the existence of another carrier offering partial service and therefore positioned to enter.

Most of the studies in Bergman's review examine the effects of actual entry rather than of constraining or prospective entry, and hence do not directly cast light on potential competition.[11] Bergman does, however, note relevant findings from the pharmaceutical industry where potential competition has been captured in either of two ways. First, Cool, Roller, and Leleux, using characteristics of nonincumbents to measure their closeness to the drug market in question, find a significant negative effect of potential competition on drug firm profit.[12]

---

9. Steven A. Morrison & Clifford M. Winston, *Empirical Implications and Tests of the Contestability Hypothesis*, 30 J.L. & ECON. 53 (1987).
10. *Id.*
11. Bergman, *supra* note 8.
12. Karel O. Cool, Lars-Hendrik Roller & Benoit Leleux, *The Relative Impact of Actual and Potential Rivalry on Firm Profitability in the Pharmaceutical Industry*, 20 STRATEGIC MGMT. J. 1 (1999).

Alternatively, Ellison and Ellison, and Bergman and Rudholm, rely on the timing of patent expiration to identify periods where potential competition is likely.[13] No actual competition is possible prior to expiration of a patent, of course, but since the patent holder knows that it will face such competition at a future date certain, its actions prior to that date can be interpreted as conditioned by imminent constraining or prospective competition. These studies find that the companies actually raise the price of their branded drugs prior to patent expiration as the firms prepare to cede the elastic portion of the market to generics and extract additional profit by raising price to the brand conscious segment.[14] Ellison and Ellison also find that postpatent prices often decline for drugs where entry is more likely, while continuing to increase where it is not.[15] These studies provide the basis for the following finding concerning the impact of potential competition:

> *Finding 3:* In pharmaceuticals, the existence of potential competitors lowers current price. The threat of entry immediately prior to patent expiration causes the companies to hasten their market segmentation strategies. Both effects confirm the impact of potential competition.

In summary, despite methodological challenges, a modest number of empirical studies of the effect of potential competitors on incumbent competition exists. These confirm the effect of potential competition and imply that it is quantitatively important. There is, in short, good reason for policy concern with the elimination of such firms through merger with, or acquisition by, incumbent firms.

3. Merger policy and potential competition

Merger policy with respect to potential competition has been articulated in a series of benchmark actions by the judiciary and the enforcement agencies over a period of 40 years. This section highlights the principles of merger policy concerning potential competition, drawing a contrast where appropriate with the underlying economics. The section first discusses the leading U.S. Supreme Court cases, agency actions, and policy statements regarding potential competition. It then offers observations concerning the rather different role that potential competition plays in merger control policy in other jurisdictions.[16]

---

13. Glenn Ellison & Sara Fisher Ellison, Strategic Entry Deterrence and the Behavior of Pharmaceutical Incumbents Prior to Patent Expiration (unpublished manuscript from 2000, on file with Massachusetts Institute of Technology); Mats A. Bergman & Niklas Rudholm, *The Relative Importance of Actual and Potential Competition: Empirical Evidence from the Pharmaceutical Market*, 51 J. INDUS. ECON. 455 (2003).
14. Bergman & Rudholm, *supra* note 13.
15. Glenn Ellison & Sara Fisher Ellison, *supra* note 13.
16. This section draws on two reviews of similar issues: Kwoka, *supra* note 2, at 192-98, and Darren D. Bush & Salvatore Massa, *Rethinking the Potential Competition Doctrine*, 2004 WIS. L. REV. 4 (2004). The latter offers a comprehensive summary of cases brought under the doctrine of potential competition.

3.1. Potential competition in the courts, enforcement agencies, and guidelines

The doctrine of potential competition was first articulated and refined in a flurry of Supreme Court cases during the 1960s. The first of these cases involved a proposed acquisition of Pacific Northwest, a producer of natural gas outside California, by El Paso Natural Gas, which supplied gas to customers in California.[17] Pacific Northwest had periodically bid to supply utilities in California but had not secured any contracts. There was, however, evidence that its bidding had altered the incumbent firm's pricing. The Supreme Court upheld the government's challenge to the acquisition on the grounds that "[u]nsuccessful bidders are no less competitors than the successful one," specifically noting that Pacific Northwest's actions had had "a powerful influence on El Paso's business attitudes within the state."[18] Pacific Northwest played a dual role in this proceeding, representing both a prospective competitor, since it was known to have contemplated actual entry, and also a constraining competitor (a firm perceived to be a possible entrant and whose elimination would widen the pricing discretion of the incumbent). It was evidence on the latter issue that was ultimately persuasive with the Court.[19]

Constraining competition also mattered in other cases of the era,[20] but prospective entry by itself proved decisive in some instances. In the FTC's challenge of the Penn-Olin joint venture, the Supreme Court reasoned that separate entry by either party to the venture, plus the possibility that the second firm remained "waiting in the wings," was competitively preferable to joint venture entry since the latter resulted in one new producer but eliminated the second possible entrant in the process.[21] In its challenge of Proctor & Gamble's acquisition of the Clorox bleach company, the FTC argued—despite the lack of any evidence of actual intent—that P&G was objectively the most likely firm to enter the liquid bleach market.[22] The Supreme Court concurred, noting that as a result of P&G's perceived potential entry "Clorox's dominant position would have been eroded and the concentration of the industry reduced"—a clear statement of the concept of a prospective entrant.[23]

These decisions validated the doctrine of potential competition in both its forms and gave rise to other proceedings. The Court appears soon to have had misgivings about the criteria for such cases, however, and substantially revised the evidentiary burden in

17. United States v. El Paso Natural Gas Co., 376 U.S. 651 (1964).
18. *Id.* at 659, 661.
19. *Id.* at 661-62.
20. See *United States v. Falstaff Brewing Corp.*, 410 U.S. 526 (1973), in which the Court upheld a challenge to Falstaff's acquisition of another brewer despite the fact there was no indication whatsoever that Falstaff might enter the market served by the acquired firm. The Court stated the issue to be simply "whether, given its financial capabilities and conditions in the . . . market, it would be reasonable to consider it a potential entrant into that market." *Id.* at 533.
21. United States v. Penn-Olin Chem. Co., 217 F. Supp 110, 131 (D. Del. 1963), *vacated*, 378 U.S. 158 (1964).
22. FTC v. Proctor & Gamble Co., 386 U.S. 568 (1967).
23. *Id.* at 575.

the *Marine Bancorporation* case in 1972.[24] *Marine Bancorporation* involved a Department of Justice (DOJ) challenge to the attempted acquisition of a bank in Spokane by a large Seattle bank. Since state banking laws at the time virtually prohibited entry into other markets, the Court rejected the government's challenge and offered its views of both actual and perceived potential competition. Regarding the former, the Court stated that "[u]nequivocal proof that an acquiring firm actually would have entered *de novo* but for a merger is rarely available."[25] The implication that unequivocal proof was required made it clear that such cases had unlikely prospects for success.

The Court appeared more willing to accept the possibility of anticompetitive effects in mergers involving constraining competitors, but here, too, it set forth a new and considerably tougher standard. Such a merger, the Court stated,

> may be unlawful if the target market is substantially concentrated, if the acquiring firm has the characteristics, capability, and economic incentive to render it a perceived potential *de novo* entrant, and if the acquiring firm's premerger presence on the fringe of the market in fact tempered oligopolistic behavior on the part of existing participants in the market.[26]

The crucial element of this three-part test has been that the potential competitor must be shown "*in fact* [to have] tempered oligopolistic behavior" among incumbent firms.[27] This standard is quite high, considerably higher in fact than that employed for analyses of mergers between existing firms. The result of the *Marine Bancorporation* decision has been that potential competition cases are substantially more difficult to establish, and hence much less frequent in actual enforcement practice.

Policy concern with mergers involving potential competitors, however, did not entirely disappear. Over the past 30 years, some enforcement actions have continued to raise these concerns, but largely as a corollary or secondary issue. A number of these actions have been brought by the Federal Trade Commission (FTC): the investigation of the GM-Toyota joint venture,[28] the challenge to the Staples-Office Depot merger,[29] and claims made in other retail consolidations and in certain pharmaceutical and medical services markets.[30] In most of these cases, the FTC secured consent orders resolving the matters without the need for (and risk of) adjudication of the claims involving potential competition. The DOJ has raised similar issues in cases involving airlines and cable TV operators, all the while seeking settlements through modification or divestiture rather than court review.[31]

A number of mergers and acquisitions that come before various regulatory agencies also involve potential competition. Recent examples include the mergers of Bell

---

24. United States v. Marine Bancorporation, 418 U.S. 602 (1974).
25. *Id.* at 624.
26. *Id.* at 624-625.
27. *Id.* (emphasis added).
28. Gen. Motors Corp., 103 F.T.C. 374 (1984) (consent decree).
29. FTC v. Staples, Inc., 970 F. Supp. 1066 (D.D.C. 1997).
30. Kwoka, *supra* note 2.
31. *Id.*

Atlantic and NYNEX,[32] Ameritech and SBC,[33] Union Pacific and Southern Pacific,[34] and numerous examples in the electric power and natural gas sectors. These transactions are analyzed by the Federal Communications Commission, the Surface Transportation Board, or the Federal Energy Regulatory Commission in accordance with a public interest standard, one aspect of which is their effect on competition. While the agencies look to the FTC, DOJ, and the courts for guidance in matters of competition policy, they have often taken more assertive stances with respect to potential competition.

For some 25 years, the key statement of merger policy in the United States has been the DOJ/FTC *Merger Guidelines*.[35] In the initial versions of the *Merger Guidelines*, potential competition issues were addressed explicitly.[36] These initial versions distinguished between perceived and actual potential competition, stated that any such mergers would be evaluated using a "single structural analysis analogous to that applied to horizontal mergers," and set out criteria for evaluation. Consistent with underlying economic principles, for example, the *Merger Guidelines* indicated that no challenge would occur in markets where entry was easy or where a comparable advantage was shared by more than three potential competitors.

Despite this initial treatment of potential competition, later revisions of the *Merger Guidelines* deleted all specific reference to the doctrine. The only subsequent reference was a statement accompanying the release of the 1992 revision to the effect that "[n]either agency has changed its policy with respect to nonhorizontal mergers,"[37] a category that previously included potential competition. Nonetheless, such concerns had clearly been relegated to secondary status.[38] This shift is ironic in that competition policy at the same time was attributing greater importance to potential entry as an affirmative defense to mergers among incumbents. Thus, mergers were more often being permitted on the grounds of ease of entry by potential competitors, the rationale being that they represented constraints on incumbents' exercise of market power.[39] Yet a merger eliminating that very nonincumbent—and therefore presumably relaxing the constraint on incumbent behavior—now seemingly triggered less concern.

This more permissive approach presumably reflected changing judicial attitudes toward potential competition mergers, but it diverged from economic understanding, as

---

32. Bell Atl., File No. NSD-L-96-10 (Fed. Commc'ns Comm'n Aug. 14, 1999).
33. Ameritech, CC Dkt. No. 98-141 (Fed. Commc's Comm'n Oct. 8, 1999).
34. Union Pac., Decision No. 44, Finance Docket No. 32760 (Surface Transp. Bd. Aug. 6, 1996).
35. U.S. DEP'T OF JUSTICE & FEDERAL TRADE COMM'N, HORIZONTAL MERGER GUIDELINES (1992) (with Apr. 8, 1997 revisions to Section 4 on efficiencies), *reprinted in* Trade Reg. Rep. (CCH) ¶ 13,104.
36. U.S. DEP'T OF JUSTICE & FEDERAL TRADE COMM'N, HORIZONTAL MERGER GUIDELINES (1982), *reprinted in* 4 Trade Reg. Rep (CCH) ¶ 13,102, ¶ 20,531; U.S. DEP'T OF JUSTICE & FEDERAL TRADE COMM'N, HORIZONTAL MERGER GUIDELINES (1984), *reprinted in* 4 Trade Reg. Rep. (CCH) ¶ 13,102, ¶ 20,564-65.
37. *See* ABA SECTION OF ANTITRUST LAW, THE 1992 HORIZONTAL MERGER GUIDELINES: COMMENTARY AND TEXT 21 (1992).
38. Indeed, a recent chief economist at the Antitrust Division described enforcement as "so rare as to make the whole notion virtually absent from antitrust." Andrew Joskow, *Potential Competition: The Bell Atlantic-NYNEX Merger*, 16 REV. INDUS. ORG. 185, 189 (2000).
39. *See* United States v. Baker-Hughes Inc., 908 F.2d 981 (D.C. Cir. 1990).

has been documented, and also from practice in other countries. As shown in the next part of this chapter, competition policy outside the United States scrutinizes mergers involving prospective or constraining competitors in a fashion more analogous to mergers between incumbents.

3.2. Potential competition and merger control in other countries

While many countries have looked to the U.S. statutes, guidelines, and enforcement practices for guidance for their competition policy, most have devoted continued, and in some instances increased, attention to potential competition, in contrast to U.S. policy. This section discusses the relevant European Union (EU) policy and then more briefly reviews policies in various countries.

Policy in the EU. In the EU, policy toward mergers was first set out in the 1989 Merger Control Regulation.[40] While the Regulation did not explicitly refer to potential competition, one provision noted the possibility of adverse "indirect effects" of mergers.[41] Indirect effects were interpreted by the European Commission as encompassing potential competition mergers that involved a dominant firm and a potential competitor that was in some sense uniquely positioned to enter. This interpretation led to a merger analysis that involved a comparison of the nonincumbent party to all other potential entrants, in order to determine whether any of the latter exerted similar competitive pressure. The merger could be challenged if the party to the merger was uniquely positioned to enter and thereby constrained incumbents.

A number of merger cases were brought under this standard, including major Commission challenges to the mergers of Telia and Telenor,[42] Air Liquide and BOC,[43] and EDP and ENI.[44] The Air Liquide-BOC undertaking was typical. The two companies produced a variety of industrial gases in many countries but with significant differences in their product/country profiles. After examination of other potential entrants, the Commission found that Air Liquide was objectively the most likely competitor to BOC in the United Kingdom, and that BOC was the most likely entrant into Air Liquide's home market of France. Accordingly, the Commission voted to prohibit the merger, although divestitures offered by the parties ultimately remedied the concerns.

The EU's approach toward potential competition mergers has been a potent policy tool with significant impact. In light of that, it is notable that the 2004 EC Merger Regulation appears to expand its reach. The new Regulation asserts that a merger involving a potential competitor may be challenged if "there should not be a sufficient number of other potential competitors, which could exert the same competitive pressure as the merging potential competitor."[45] Rather than uniqueness of the eliminated

40. Council Regulation (EEC) 4064/89 of 21 December 1989 on the Control of Concentrations between Undertakings, 1989 O.J. (L 395) 1-12.

41. *Id.*

42. Case IV/M 1439, Telia/Telenor (Commission Decision Oct. 13, 1999).

43. Case COMP/M.1630, Air Liquide/BOC (Commission Decision Jan. 18, 2000).

44. Case COMP/M.3440, EDP/ENI/GDP (Commission Decision Sept. 12, 2004).

45. Council Regulation (EC) 139/2004 of 20 January 2004 on the Control of Concentrations between Undertakings, 2004 O.J. (L 24) 1-22, ¶ 73.

potential entrant, this standard requires that there be some number (unspecified, but presumably greater than one) of equally capable nonincumbents before the elimination of the one potential competitor is judged harmless. This language, plus the deletion of the earlier requirement that one of the parties be dominant, seems to many observers to expand the range of mergers subject to scrutiny for their implications involving potential competitors in the EU.

Member nations of the EU have their own competition policies, not all of which mention or enforce standards regarding potential competition. There are, however, some noteworthy examples of explicit reference to potential competition. The 2002 Enterprise Act in the United Kingdom, for example, discusses possible harms from merger and the role of entry, and then states:

> The effect of a merger on the possibility and/or likelihood of new entry might itself contribute to a substantial lessening of competition where a merger increases barriers to entry or otherwise reduces/eliminates the competitive constraint represented by new entry. This might arise, for example, where the acquired entity was one of the most likely entrants or was genuinely perceived as such by those already in the market . . . .[46]

While the first sentence appears to focus on the elimination of a constraining competitor, the second accurately states the relevant economic propositions with respect to both constraining and prospective competitors.

In Germany, the Principles of Interpretation of merger control include an explicit definition of what constitutes potential competitors, specifically:

> *inter alia* firms which clearly intend to enter the market, firms which already produce or purchase the goods or services concerned for their own needs, which supply to geographically close markets, or which have capacities that can be quickly adapted, or are active in upstream or downstream markets.[47]

The Principles then state the competitive concern as follows: "If the scope of action of an established powerful firm is very significantly controlled by a potential competitor, a merger with this competitor may lead to the established firm gaining a paramount market position . . . ."[48] As with the U.K. guidance, this language is readily understood in light of the economic propositions and findings that have been previously reviewed in this chapter.

Policy outside the EU. The current Canadian Merger Enforcement Guidelines are equally explicit. The harm termed "prevention of competition" is described as occurring when "a merger enables the merged entity . . . to sustain higher prices . . . by hindering the development of future competition."[49] Among five examples of the prevention of competition that are given, the following three are particularly relevant:

---

46. Enterprise Act 2002, 2003, c. 40, § 4.25.
47. BUNDESKARTELLAMT, PRINCIPLES OF INTERPRETATION ¶ 5.5 (2000).
48. *Id.*
49. COMPETITION BUREAU CANADA, MERGER ENFORCEMENT GUIDELINES ¶ 2.10 (Sept. 2004), http://www.competitionbureau.gc.ca/PDFs/2004%20MEGs.Final.pdf.

- the acquisition of an increasingly vigorous competitor or a potential entrant,
- the acquisition of an existing business by a firm that would likely have entered the market in the absence of the merger, and
- an acquisition that prevents expansion into new geographic markets.[50]

Enforcement of this and similar provisions in earlier Canadian guidelines has resulted in several cases against proposed mergers involving potential competition.

Neither the Australian nor New Zealand guidelines for mergers and acquisitions explicitly discuss mergers involving incumbents and potential competitors. Both, however, contain extensive discussion of entry conditions, the risks to competitive constraints from certain types of mergers, and an analysis of import competition in terms that are suggestive of potential competition concerns.[51] It is presumably through these factors and associated reasoning that the guidelines address such mergers.

Finally, the new Japanese Guidelines to Application of the Antimonopoly Act discuss the factors that will be considered in the process of merger evaluation. With respect to potential competition, the Japanese Guidelines provide as follows: "It is also considered that the business combinations will eliminate the possibility of new entries if a part of the parties are the potential competitors to the other part of the parties."[52] It would seem evident from this passage that mergers that eliminate potential competitors are treated as threats to competition.

There is obviously considerable variation in the manner in which merger control in other countries addresses potential competition concerns. In most jurisdictions, however, that doctrine is an explicit part of their guidelines and enforcement, and in at least one instance the provisions have recently been strengthened.

4. Policy implications

It is clear that the elimination of a constraining potential competitor will have adverse effects on market performance. It is equally clear that the elimination of a prospective competitor—that is, a nonincumbent objectively likely to enter—will result in higher concentration than otherwise would be the case. The magnitude of these effects will differ from case to case, but empirical evidence suggests it may well be nontrivial. All of these propositions are straightforward implications of the underlying economics, and for the most part have been accepted in principle by the U.S. courts. The difficulty appears to have been in making these propositions convincingly operational, that is, identifying defining characteristics of constraining and prospective competitors whose merger with an incumbent firm is likely to result in altered equilibrium price. The courts appear to be acutely concerned with the possibility that a nonincumbent firm that is not a potential entrant might be incorrectly judged to be one, with the effect of preventing a competitively harmless merger.

---

50. *Id.* ¶ 2.12.

51. AUSTRALIAN COMPETITION AND CONSUMER COMM'N, MERGER GUIDELINES (June 1999); NEW ZEALAND COMMERCE COMM'N, MERGERS AND ACQUISITIONS GUIDELINES (Jan. 1, 2004).

52. JAPAN FAIR TRADE COMM'N, GUIDELINES TO APPLICATION OF THE ANTIMONOPOLY ACT CONCERNING REVIEW OF BUSINESS COMBINATION (May 31, 2004), http://www.jftc.go.jp/e-page/legislation/ama/MAreview.pdf.

The sole method to avoid mistakenly preventing harmless mergers is to set the standard of proof very high. This has been the effect of the *Marine Bancorporation* decision. This policy has caused the DOJ and FTC essentially to stop bringing cases on potential competition grounds. Instead, the agencies have been forced to find other grounds for challenging such mergers, settle cases on less favorable terms, or simply permit mergers despite concerns about the elimination of potential competition.

Given the convergence of economics and antitrust with respect to most issues, their disconnect in the case of potential competition is unfortunate, and perhaps unnecessary. Recently, however, there have been efforts to restate the doctrine with more precise definitions and tests in the hope of satisfying judicial standards. This chapter suggests the following two-step approach as one example of such a test.[53]

The first step is to determine whether the market consisting of current producers is at least moderately concentrated, since it is only such a market that would be affected by potential competitors. The second step differs depending on whether it is a prospective competitor or a constraining competitor that is involved. For the former case, a merger eliminating the prospective competitor would be challenged if it met the same criteria as those that make a nonincumbent a "committed entrant" under the *Merger Guidelines*, that is, if the prospective competitor (1) can enter within two years, (2) would find entry profitable at the current price, and (3) can enter at a sufficient scale to reduce that price. In addition, in order to rule out concern where the number of prospective entrants is large, an additional criterion is that the potential competitor be either (4) one of no more than five equally well positioned prospective entrants, or significantly better positioned than any other possible entrant.

The first three of these conditions are precisely those set forth in the *Merger Guidelines* for determination of whether a nonincumbent firm is a "committed entrant," that is, whether it is capable of quick and effective entry. The reasoning behind their use here is that any firm satisfying these criteria also must logically affect market equilibrium if it is eliminated by merger or acquisition by an incumbent. The fourth criterion is not to be found in the *Merger Guidelines*, but instead represents a judgment based on empirical evidence concerning the frequency of actual entry and hence the need for multiple potential competitors.[54]

In the case of a constraining competitor, the test would be "convincing evidence that the firm represented an effective and significant constraint on competition among incumbents."[55] The evidence could take the form of documents demonstrating that incumbent firms monitored and responded to the nonincumbent, or alternatively market data and statistical analysis establishing the responsiveness of incumbents to the nonincumbent's actual actions. There is now considerable experience in developing both kinds of evidence in merger cases.[56]

While not without its difficulties, this approach is no less accurate and operational than the *Merger Guidelines* provisions with respect to mergers among incumbents, on

53. Kwoka, *supra* note 2, at 173; *see also* Joseph Brodley, *Potential Competition Mergers: A Structural Synthesis*, 87 YALE L.J. 1 (1977); Bush & Massa, *supra* note 16.

54. Paul A. Geroski, *What Do We Know About Entry?*, 13 INT'L J. INDUS. ORG. 421, 421-40 (1995).

55. Kwoka, *supra* note 2, at 200.

56. This point is vividly illustrated by *FTC v. Staples, Inc.*, 970 F. Supp. 1066 (D.D.C. 1997).

which this approach is based. That is, this approach is no more burdensome or likely to err than is the process for identifying a committed entrant, which constitutes an integral part of the accepted *Merger Guidelines* criteria for assessing conditions of entry as a defense to an otherwise problematic merger. Accordingly, this approach merits consideration as a basis for reinvigorating the potential competition doctrine in the United States.

5. Conclusion

Over the past 30 years, the doctrine of potential competition has nearly disappeared from active antitrust policy in the United States. This has occurred despite the fact that (1) economic theory has drawn a strong connection between potential competitors and market performance, (2) empirical evidence confirms the impact of such competitors and, by implication, of their loss, and (3) the elimination of a potential competitor is a growing concern of competition policy in most other countries. There is inherent ambiguity in the process for identifying a potential competitor and measuring its effect, but that ambiguity is no greater or more troublesome than other parts of the widely accepted *Merger Guidelines* approach to evaluating mergers. These considerations suggest that policy toward the elimination of potential competition may benefit from further examination of economic theory, empirical evidence, and policy elsewhere. Out of this process may emerge a clearer and more acceptable statement of the conditions necessary for evaluating mergers that eliminate constraining and prospective competitors.