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OECD ROUNDTABLE ON PORTFOLIO EFFECTS IN CONGLOMERATE MERGERS

RANGE EFFECTS:
THE UNITED STATES PERSPECTIVE

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The antitrust laws protect competition not for its own sake, but as a means to promote allocative and productive efficiency and thereby enhance consumer welfare. They condemn mergers that will enable the merged firm to restrict output and raise prices because such mergers reduce efficiency, making life easier for the merged firm and its rivals. Sound antitrust policy should not, therefore, condemn a merger *because* it will make the merged firm more efficient. Such mergers will almost certainly enhance consumer welfare, in no small part by making life harder for the firm's rivals who will themselves have to become more efficient or perish.

We are very concerned that the "range effects" theory of competitive injury that is gaining currency in certain jurisdictions places the interests of competitors ahead of those of consumers and will lead to blocking or deterring pro-competitive, efficiency-enhancing mergers. We are also concerned that the theory, unless more clearly defined, will lead to less predictability in antitrust enforcement. We therefore welcome the opportunity the OECD has provided to examine "range effects" more closely.

Introduction

The United States has had over 40 years experience in evaluating the competitive effects of non-horizontal mergers, including so-called conglomerate mergers. During the ten-year period from 1965 to 1975, the United States experienced a wave of conglomerate mergers. During this period, the U.S. antitrust agencies and courts experimented with a number of theories of competitive harm from conglomerate mergers, including one, entrenchment, that bears remarkable similarity to the "range effects" theories now gaining currency. Under this entrenchment doctrine, as embodied in the U.S. Supreme Court's decision in *FTC v. Procter & Gamble*,[1] mergers could be condemned if they strengthened an already dominant firm through greater efficiencies or gave the acquired firm access to a broader line of products or greater financial resources, thereby making life harder for smaller rivals.

The U.S. antitrust agencies eliminated entrenchment as a basis for challenging non-horizontal mergers in 1982 when the Department issued its new Merger Guidelines and the Federal Trade Commission issued its Statement on Horizontal Mergers. We did so because we recognized that efficiency and aggressive competition benefit consumers, even if rivals that fail to offer an equally "good deal" suffer loss of sales or market share. Mergers are one means by which firms can improve their ability to compete. It would be illogical, we concluded, to prohibit mergers *because* they facilitate efficiency or innovation in production. Unless a merger creates or enhances market power or facilitates its exercise -- in which case it is prohibited under Section 7--

[1] *FTC v. Procter & Gamble Co.*, 386 U.S. 568 (1967).

it will not harm, and more likely will benefit, consumers.

As we understand it from the European Commission decisions we have reviewed, "range effects" appear to embody three related theories of competitive harm: (1) that the merger will create economies of scale and scope that other firms will not be able to match; (2) that the merged firm will gain a decisive advantage over its competitors by virtue of its greater size and financial resources; and (3) that the merger will facilitate the tying or bundling of complementary products.

The first two theories of competitive harm appear no different from those found in *Procter & Gamble* and should be rejected for the same reason they were in the United States a generation ago. Challenging a merger because it will create a more efficient firm through economies of scale and scope is at odds with the fundamental objectives of the antitrust laws. And there is no empirical support for the notion that size alone conveys any significant competitive advantage that is not efficiency-related.

The third theory, that a merger may harm competition by facilitating the bundling of complementary products, has more superficial appeal. Plainly, a forced tie by a firm with market power in the market for the tying product can, under some circumstances, serve as an anti-competitive exclusionary practice.[2] The problem with this theory, however, is that it has been used in some cases to block mergers, not because they may facilitate the type of tying that is unlawful under the antitrust laws — namely, forced ties imposed by firms with market power in order to foreclose rivals from the market without advancing any legitimate business purpose — but rather because they may facilitate efficient bundling — that is, voluntary bundling through discounts or otherwise that benefits customers by offering them the improved products, lower prices and lower transactions costs they desire. It does so, moreover, on the basis of a theory of competitive harm that depends on a highly attenuated chain of causation that invites competition authorities to speculate about what the future is likely to bring. As the Secretariat points out in its paper for this roundtable, merger specific efficiencies and the effects of joint pricing would normally increase economic welfare. For buyers to suffer net harm as a result of a merger that facilitates bundling, at least seven conditions must be met:

1. The merged firm must enjoy such significant efficiencies and/or internalised complementary pricing (or analogous) effects from the merger that it finds it profitable to drop prices below pre-merger levels in at least one market . . . ;
2. Neither rivals nor new entrants can match the merged firm's new costs [or prices];
3. Rivals will exit;
4. Buyers cannot use countervailing power to hold prices at or below pre-merger levels;
5. Firms will not enter or re-enter the market in response to price increases above pre-merger levels;
6. The merged entity finds it profitable to raise prices above pre-merger levels; and

[2] *See, e.g., United States v. Microsoft*, 253 F.3d 34, 87 (D.C. Cir. 2001).

7. What buyers initially gain through prices set below pre-merger levels is less than what they later lose through paying higher than pre-merger prices.[3]

Proof that all these conditions have been met requires making guesses about the future conduct of the merged firm, its customers and its rivals that are beyond the capability of even the most prescient competition authority. Not surprisingly, therefore, most of the range effects decisions we have reviewed make no effort to determine whether these conditions are met.

We are concerned, therefore, that the range effects theory as applied will lead antitrust regulators to disapprove efficiency-enhancing mergers on the basis of highly speculative and unprovable theories of competitive harm. Without a high standard of proof, range effects theory runs the risk of becoming an ill-defined, catch-all theory that allows antitrust regulators to challenge virtually any merger on the basis of vague fears of "dominance." Such an arbitrary policy stands both to increase uncertainty about antitrust enforcement and potentially deter a large class of efficient mergers. It would represent a step backwards in the evolution of antitrust policy, which has generally been moving towards more clearly-defined, economics-based enforcement criteria. It also risks converting competition authorities into complaint bureaus for disgruntled competitors who find it easier to seek protection from government regulators than to compete in the market.[4]

The remainder of this paper develops these points more systematically. Part I reviews the U.S. experience with similar entrenchment theories during the period from 1965 to 1975. Part II reviews the evolution of the range effects doctrine in EU merger decisions over the last five years.[5] Part III provides an economic analysis of the range effects doctrine as applied by the European Commission in recent cases, showing why we believe it is antithetical to sound competition policy. Part IV discusses the range effects issues we examined in *GE/Honeywell*, and shows why we concluded that the evidence did not support the theory in that case.

I. The United States' Experience with Entrenchment Theories

In the decade from 1965 to 1975, the United States experienced a wave of conglomerate mergers. When this wave first began, antitrust enforcers and scholars were uncertain as to the

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[3]Issues Paper by the Secretariat of the OECD Committee on Competition Law and Policy for Discussion at Roundtable on Portfolio Effects in Conglomerate Mergers 2 (Oct. 2, 2001) (on file with OECD).

[4]*See* Jim Chen, *The Legal Process and Political Economy of Telecommunications Reform*, 97 Colum. L.Rev. 835, 866 (1997).

[5] While our paper's discussion of range effects focuses on EC merger decisions, it is important to note that the German and Spanish contributions to this Roundtable discuss those agencies' experiences in applying portfolio effects analysis to several recent mergers -- and, in the German case, to some not-so-recent mergers.

likely competitive effects of these mergers, but there was considerable political concern about a "rising tide of concentration" resulting from them. In response, the U.S. antitrust agencies challenged a number of these mergers under a variety of theories. In one of these cases, *FTC v. Procter & Gamble Co.*, 386 U.S. 568 (1967), the United States Supreme Court embraced a theory of competitive harm -- now called "entrenchment" -- that was remarkably similar to the current "range effects." The *Procter & Gamble* decision led to a number of other cases invoking this entrenchment theory. These cases stimulated a critical examination of the theory by legal and economic scholars, which persuaded both the Department and the Federal Trade Commission in 1982 to abandon entrenchment as a basis for challenging non-horizontal merger cases.

A. The Procter & Gamble Decision

Procter & Gamble involved a product extension merger. The acquired firm, Clorox, was the leading manufacturer in the "heavily concentrated" household bleach market, with a 49 percent (and growing) share of national sales and higher shares in some local markets. Procter & Gamble (P&G), the acquiring firm, was a large, diversified manufacturer of other household products, primarily soaps and detergents, but did not produce bleach.

The Supreme Court agreed with the FTC's assessment that the acquisition might substantially lessen competition both because it would eliminate P&G as a potential entrant into the bleach market and because "the substitution of the powerful acquiring firm for the smaller, but already dominant, firm may substantially reduce the competitive structure of the industry by raising entry barriers and by dissuading the smaller firms from aggressively competing." 386 U.S. at 578. In this regard, the Court focused on the importance of advertising as "the major competitive weapon" in the bleach market. *Id*. at 579. According to the Court, P&G had a larger budget than Clorox and could use it to defeat "the short term threat of a new entrant"; it could also "use its volume discounts to advantage in advertising Clorox." *Id*. The Court was concerned, therefore, that the acquisition might lessen competition because new entrants -- whether new firms or small firms expanding geographically -- would be "much more reluctant to face the giant Procter than . . . the smaller Clorox." *Id*.[6]

B. Scholarly Commentary on, and Other Criticism of, the Entrenchment Doctrine

[6]The Court also cited the Commission's findings that Clorox would become a more formidable competitor because "retailers might be induced to give Clorox preferred shelf space since it would be manufactured by Procter, which also produced a number of other products marketed by the retailers," and "Procter might underprice Clorox in order to drive out competition, and subsidize the underpricing with revenue from other products." 386 U.S. at 575.

The *Procter & Gamble* decision quickly joined *Von's Grocery,*[7] *Schwinn,*[8] *Albrecht,*[9] and *Topco*[10] as one of the most frequently and heavily criticized of the Warren Court's antitrust decisions.[11] Two of the most influential scholarly critiques of the decision's entrenchment theory and the lower court decisions it spawned were by Phillip Areeda and Donald Turner in their influential *Antitrust Law* treatise[12] and by Robert Bork in *The Antitrust Paradox*.[13] Both are worth summarizing briefly. In addition, a number of empirical studies of conglomerate mergers have found no evidence to support the theory.

1. <u>Areeda and Turner</u>

Areeda and Turner focused first on the *Procter & Gamble* decision's concern that a conglomerate merger might create or strengthen a dominant position by enabling the merged firm to capture cost savings and other efficiencies, especially in connection with product marketing or promotion, thereby giving it a competitive advantage over rival firms, which might then fail or be forced to seek similar mergers in order to survive. They showed that because resource savings are socially desirable, condemning mergers for this reason is contrary to sound antitrust policy:

> *First*, . . . such economies would bring competition to an end only if substantial and not substantially available to most rivals -- a result seen in no conglomerate merger case of which we are aware. *Second*, rivals would expire only because they were unable or unwilling to meet the lower price or higher quality of the more efficient firm. The public would be realizing the fruits of those efficiencies. The more efficient firm could seldom raise its prices to or above pre-merger levels without attracting new entry. Even if the more efficient firm were ultimately to become an exploitative monopoly, the public would enjoy the benefit of reduced resource use. *Third*, public policy cannot rationally seek to prevent the realization of more efficient production modes out of the speculative fear that monopoly might result.... *Fourth*, even if greater concentration were certain to result, an

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

[8]*United States v. Arnold Schwinn & Co.*, 388 U.S. 365 (1967).

[9]*Albrecht v. Herald Co.*, 390 U.S. 145 (1968).

[10]*United States v. Topco Assocs.*, 405 U.S. 596 (1972).

[11] Some of these decisions have since been expressly overruled. *See Continental T.V. Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36 (1977) (overruling *United States v. Arnold, Schwinn & Co.*, 388 U.S. 365 (1967)); *State Oil Co. v. Khan*, 522 U.S. 3 (1997) (overruling *Albrecht v. Herald Co.*, 390 U.S. 145 (1968)).

[12]Phillip E. Areeda & Donald F. Turner, *Antitrust Law* (1980).

[13]Robert H. Bork, *The Antitrust Paradox* (1978).

> insistence on continued inefficiency seems the antithesis of competition. Antitrust law promotes competition because it is efficient.

V Areeda & Turner, *supra*, ¶1103c, at 9.

Turning to the related concern found in several other early cases "about the competitive advantage of a wider product line resulting from a conglomerate merger," Areeda and Turner argued that "apart from the 'leverage' possibility, there is unlikely to be any prejudice to rivals at all, for they too can usually arrange packages or one-stop service when buyers demand them. And if they cannot, then the merged firm's provision of those new services valued by customers is not a social evil but a contribution to their welfare." *Id.* ¶1109d, at 36. "Such savings are real benefits to buyers and are no basis for antitrust censure." *Id.* ¶1109d3, at 40. With respect to the "leverage possibility" -- that is, the concern that having a broad product line may provide increased opportunity for tying -- Areeda and Turner expressed "serious doubt that very substantial foreclosure would often come about via tying that is too vague to catch the eye or to be proved." *Id*. ¶1134, at 208. That being the case, the "positive prohibitions against tying in the concrete are probably powerful enough to prevent most of the tying that the law has cared about, quite without the necessity of preventing conglomerate mergers creating the potential for undetectable or unreachable tying." *Id.* They urged, therefore, that "[s]peculative" leverage concerns should be discounted because tying and full-line forcing can be controlled directly by the antitrust laws." *Id.* ¶1109d3, at 41.

2. <u>Bork, The Antitrust Paradox</u>

Robert Bork, in his classic work, *The Antitrust Paradox*,[14] similarly argued that "[t]he *Procter & Gamble* decision makes sense only when antitrust is viewed as pro-small business -- and even then it does not make much sense, because small business is protected from Clorox's cost advantages only when they happen to be achieved through merger."[15] He concluded that "the effects the Court and the Commission attributed to the merger were manifestations of efficiency, and hence reasons to welcome the merger rather than condemn it."[16] Far from "frightening smaller companies into semiparalysis," Bork argued that conglomerate mergers that generate efficiencies will force smaller competitors "to improve, rather than worsen, their competitive performance," leaving consumers better off.[17]

3. <u>Empirical Evidence</u>

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[14]Bork, *supra, at* 252-57 (1978).

[15]*Id.* at 255.

[16]*Id.*

[17]*Id.* at 256-57.

In addition to the scholarly criticisms of entrenchment theories, a number of empirical studies of conglomerate mergers found that experience did not bear out the types of concerns that underlay the entrenchment theory. In fact, the conglomerate mergers that made up the merger wave of the 1960s were found to have generally been unprofitable.[18] Later spinoffs from these conglomerates have been much more successful.[19]

C. Merger Guidelines

The Department's original merger guidelines, issued in 1968 shortly after the Supreme Court's *Procter & Gamble* decision, tentatively embraced the entrenchment theory, stating that the Department "may in particular circumstances bring suit" under Section 7 against a non-horizontal merger "where an acquisition of a leading firm in a relatively concentrated or rapidly concentrating market may serve to entrench or increase the market power of that firm or raise barriers to entry in that market."[20] In its complete rewrite of the Merger Guidelines in 1982, the Department, influenced by the growing trend in the court decisions and by the critical scholarly commentary, eliminated entrenchment as a basis for challenging non-horizontal mergers. In so doing, the Department acted consistently with the recommendation of the American Bar Association Section on Antitrust Law. As the Section explained,

> The entrenchment doctrine is essentially based on three concerns: (1) the 'deep pocket' resulting from the merger will discourage entry; (2) the deep pocket will also permit the target firm to engage in predatory conduct, such as pricing below marginal cost, and (3) the merger will enable the target company to achieve certain economies not available to other firms. The first reason is ephemeral at best and is not supported by empirical evidence. . . . The second reason requires an assumption that firms will engage in illegal acts which would be prohibited by other provisions of the antitrust laws in any event. The third reason is only viable if one concludes that certain economies are inherently anticompetitive, a conclusion for which there is little, if any, support.[21]

By 1982, then, the entrenchment doctrine was thoroughly discredited in nonjudicial circles in the U.S., and the courts soon came to share that view.

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[18] *See, e.g.*, David J. Ravenscraft and F.M. Scherer, *The Profitability of Mergers*, Int'l J.of Indus. Org. 7, 101 (1989).

[19]*See* P. Custatis, J. Miles, & J.R. Woolridge, *Restructuring Through Spinoffs: The Stock Market Evidence*, J. Fin. Econ. 33, 293 (1993).

[20]*U.S. Dep't of Justice Merger Guidelines*, 33 Fed. Reg. 23,442 (1968), *reprinted in* 4 Trade Reg. Rep. (CCH) ¶ 13,101.

[21]Robert D. Joffe, Kolasky, McGowan, Mendez-Penate, Edwards, Ordover, Proger, Solomon, & Toepke, *Proposed Revisions of the Justice Department's Merger Guidelines*, 81 Colum. L. Rev. 1543, 1569-70 (1981).

D. Subsequent Developments in U.S. Law

In the first few years following the Supreme Court's decision in *Procter & Gamble*, several courts of appeals applied the Court's reasoning to find conglomerate mergers illegal under Section 7 because they were likely to further "entrench" a dominant firm.[22] By the mid-1970s, however, the courts and the FTC, influenced by the growing scholarly criticism of the Court's decision, began consistently rejecting these types of challenges, finding that the plaintiff had not proven that entrenchment was likely.[23]

Indeed, although the Supreme Court has never had occasion to revisit its *Procter & Gamble* entrenchment theory, developments in Clayton Section 7 and Sherman Act cases in the last 25 years make it extremely unlikely that a merger could be successfully challenged under the kind of range effects theories currently found in some recent European decisions. U.S. law defines competition in terms of consumer welfare. Perhaps the single most quoted aphorism in

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[22]*See, e.g., Kennecott Copper Corp. v. FTC,* 467 F.2d 67, 70 (10th Cir. 1972) (upholding FTC conclusion that Kennecott's acquisition of Peabody Coal would violate Section 7 in part because "Kennecott's deep pocket operating on a market which, though a loose oligopoly, is growing more concentrated" created "a likelihood of diminishing competition"); *Allis-Chalmers Mfg. Co. v. White Consol. Ind.*, 414 F.2d 506, 578 (3d Cir. 1969) (reversing denial of preliminary injunction on ground that the product extension merger at issue "may enable significant integration in the production, distribution or marketing activities of the merging firms" and that creation of "a company offering such a complete product line would raise higher the already significant barriers to the entry of others into the various segments of the metal rolling mill market"); *General Foods v. FTC*, 386 F.2d 936, 943-46 (3d Cir. 1967) (holding unlawful General Foods' acquisition of S.O.S., one of the two leading makers of steel wool soap pads, on the ground that the merger "has raised to virtually insurmountable heights entry barriers which were already high, . . . changed the steel wool pad market [from] two substantially equal-sized companies and several smaller firms to one in which S.O.S. is now dominant, and . . . that the substitution of General Foods for S.O.S. . . . will paralyze any incentive to compete which might otherwise have existed").

[23]For example, in *Emhart Corp. v. USM Corp.*, 527 F.2d 177 (1st Cir. 1975), the First Circuit found no Section 7 violation in the acquisition of USM, a shoe machinery business, by Emhart, a diversified manufacturing firm. The court specifically declined to "recognize per se entrenchment." *Id.* at 181. The court held that although "the entrenchment doctrine properly blocks artificial competitive advantages, such as those derived from certain promotional and marketing techniques," it does not apply to "simple improvements in efficiency." *Id.* at 182. The Second Circuit, in *Missouri Portland Cement Co. v. Cargill, Inc.*, 498 F.2d 851 (2d Cir. 1974), likewise declined to accept a "deep pocket" or "entrenchment" theory in a merger challenge. The court found the "'deep pocket' claim ... more theoretical than real": "Many of the companies in the business are controlled by economic giants already," but "smaller competitors have survived among those giant conglomerates in the past, [and] it seems unlikely that [the acquiree] will pose an insuperable new obstacle simply because of itsacquisition by a wealthy stranger." *Id.* at 865. The last two entrenchment cases filed by the FTC in the mid-1970s likewise ended in decisions by the Commission that the mergers in question had not been shown to entrench the market position of the merging firms. *Heublein, Inc.*, 96 F.T.C. 385 (1980); *Beatrice Foods*, 101 F.T.C. 733 (1983).

U.S. antitrust jurisprudence is that the antitrust laws "protect competition not competitors."[24] As the Supreme Court explained in *Spectrum Sports, Inc. v. McQuillan*:

> The purpose of the [Sherman] Act is not to protect business from the working of the market; it is to protect the public from failure of the market. The law directs itself not against conduct which is competitive, even severely so, but against conduct which unfairly tends to destroy competition itself. . . . [The Supreme] Court and other courts have been careful to avoid construction of Section 2 which might chill competition rather than foster it [, recognizing that] it is sometimes difficult to distinguish robust competition from conduct with long-term anticompetitive effects.[25]

Competitors, therefore, do not have a cause of action under the antitrust laws against a merger on that ground that it makes the merged firm more efficient, even if they fear they may as a result be forced from the market. In *Brunswick v. Pueblo Bowl-O-Mat*, 429 U.S. 477 (1977), competitors challenged Brunswick's acquisition of several bowling centers that otherwise would have closed, claiming that they were injured because their profits would have increased if the acquired centers had closed instead. The Supreme Court held that the competitors lacked standing because they were not alleging *antitrust* injury. Quoting *Brown Shoe*, 370 U.S. at 320, the Court emphasized that "the antitrust laws were enacted for 'the protection of *competition* not *competitors*,'" and it would be "inimical to the purposes of those laws" to award damages for injury resulting from enhanced competition.

In *Monfort of Colorado, Inc. v. Cargill, Inc.*, 479 U.S. 104 (1986), the Supreme Court held more generally that competitors do not have standing to challenge a merger on the ground that the merger may enable the merged firm to realize efficiencies and thereby "lower its prices to a level at or only slightly above its costs." *Id.* at 114-17. Relying on *Brunswick*, the Court wrote that:

> [T]he antitrust laws do not require the courts to protect small businesses from the loss of profits due to continued competition, but only against the loss of profits from practices forbidden by the antitrust laws. . . . [C]ompetition for increased market share is not activity forbidden by the antitrust laws. It is simply vigorous competition. To hold that the antitrust laws protect competitors from the loss of profits due to such price competition would, in effect, render illegal any decision by a firm to cut prices in order to increase market share. The antitrust laws require no such perverse result, for "[i]t is in the

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[24] *Brown Shoe Co. v. United States*, 370 U.S. 294, 320, 344 (1962).

[25] 506 U.S. 447, 458 (1993). *Accord, e.g., Eastman Kodak v. Image Technical Services, Inc.*, 504 U.S. 451, 482-83 (1992) (aggressive competition serves consumers and therefore is not condemned by the antitrust laws, even if it impairs rivals' opportunities, unless it is exclusionary, *i.e.*, without valid business justification); *see also*, Muris, *The FTC and the Law of Monopolization*, 67 Antitrust L.J. 693 (2000).

> interest of competition to permit dominant firms to engage in vigorous competition, including price competition."[26]

Courts have interpreted Section 7 of the Clayton Act in a manner consistent with these standing decisions. Section 7 forbids only those mergers that are "likely to hurt consumers."[27] Rather than being a reason for condemning a merger, significant efficiencies benefitting consumers are relevant to "the acquisition's overall effect on competition"[28] because they may justify an otherwise anticompetitive merger.[29] Thus, a merger that would hurt rivals but otherwise benefit consumers will not violate Section 7.

Condemning a merger on the ground that it may enable the merged firm to drive rivals from the market through greater efficiency and lower, but nonpredatory, prices would also be inconsistent with the development of the U.S. antitrust laws with respect to predation. The Supreme Court has emphasized that it would be contrary to the purposes of the antitrust laws to condemn "low" pricing that is "above an appropriate measure of costs" as "predatory" simply because it injures a less efficient competitor:[30]

> [W]e have rejected elsewhere the notion that above-cost prices that are below general market levels or the costs of a firm's competitors inflict injury to competition cognizable under the antitrust laws. . . . As a general rule, the exclusionary effect of prices above a relevant measure of cost either reflects the lower cost structure of the alleged predator, and so represents competition on the merits, or is beyond the practical ability of a judicial tribunal to control without courting intolerable risks of chilling legitimate price cutting.[31]

E. The Legal Status of Entrenchment Theory Today

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[26]*Monfort* at 116. Because Monfort had conceded it would *not* be driven from the market by "a cost-price squeeze," the Court did *not* reach the question whether "Congress intended the courts to apply §7 so as to keep small competitors in business as the expense of efficiency." *Id.* at 116 n. 11. It noted, however, that "there is considerable disagreement about this proposition." *Id.*

[27]*United States v. Rockford Mem'l Corp.,* 898 F.2d 1278, 1282 (7th Cir. 1990)

[28]*FTC v. Univ. Health, Inc.*, 938 F.2d 1206, 1222 (11th Cir. 1991).

[29]*See U.S. Dep't of Justice & Federal Trade Comm'n Horizontal Merger Guidelines*. 4 Trade Reg. Rep. (CCH) ¶ 13,104 (1992 and revised 1997).

[30] *Matsushita Electric Industrial Co. v. Zenith Radio Corp.,* 475 U.S. 574 (1986); *Brooke Group. Ltd. v. Brown and Williamson Tobacco Corp.,* 509 U.S. 209 (1993). *See also, Atlantic Richfield Co. v. USA Petroleum Co.*, 495 U.S. 328 (1990) (lost sales resulting from non-predatory price reductions do not cause "antitrust injury.")

[31]*Brooke Group* at 223.

As this brief review shows, U.S. antitrust law has evolved well beyond the "big is bad" logic of *Procter & Gamble.* Informed by economic theory and empirical evidence, we now have a better understanding of the ways in which merger-related efficiencies are likely to benefit consumers and how competitors are likely to respond. Thus, we now understand that the *Procter & Gamble* entrenchment theory is at odds with the fundamental principle of U.S. antitrust law that only conduct that is likely to reduce consumer welfare is barred. Because efficiencies are likely to benefit consumers, they are to be encouraged, even if they may strengthen a particular firm at the expense of its competitors. As we discuss in the following sections of this paper, there is no basis for presuming that the efficiency advantages a firm may gain from acquiring the producer of a complementary product will lead to market power detrimental to consumer welfare in the foreseeable future, and only under very limited conditions is this even a hypothetical possibility. Such hypothetical possibilities would not support a challenge under Clayton Section 7, which requires a showing of a substantial probability that the merger will lessen competition. This requirement is a sound one -- an effort to assess and weigh anticipated near term efficiency benefits against more speculative longer term market power possibilities would carry a high risk of enforcement errors and of deterring economically desirable transactions.

II. Range Effects as a Theory of Competitive Harm in Recent EC Merger Decisions

Over the last several years, the European Commission and other European antitrust agencies have been making increasing use of what they call "portfolio power," "conglomerate effects," or "range effects" as a theory of competitive harm in markets in which there is no direct horizontal overlap between the merging parties. As we read those decisions, the terms are used interchangeably to encompass a variety of different means by which a merger may allegedly create or strengthen a dominant position in non-overlap markets. These avenues of harm can be roughly organized into three categories: tying/bundling, efficiencies, and a general fear that as a firm becomes larger its very size will undermine effective competition (*i.e.*, "big is bad").

These three categories of harm are illustrated below with examples from some prominent EU cases addressing portfolio effects.

A. Guinness/Grand Metropolitan[32]

All three strands are present in *Guinness/Grand Metropolitan,* where the Commission required the merged firm to end its distribution agreement of Bacardi rum in Greece, despite no market share overlap. The Commission justified this relief on the grounds that a wide portfolio of leading brands "confers considerable price flexibility and marketing opportunities" and gives the merged firm "the possibility of bundling sales or increasing the sales volume of one category by

[32] *Guinness/Grand Metropolitan,* 1998 O.J. (L 288) 24-54 (Case No. IV/M. 938, October 15, 1997)

tying it to the sale of another category."[33]

B. *Coca-Cola/Carlsberg*[34]

Concerns about tying and enhanced efficiencies are present also in the Commission's *Coca-Cola/Carlsberg* decision, where it required the merged firm to divest its interest in a carbonated soft drink (CSD) bottling company as well as its interest in the third largest cola brand in Denmark. The Commission argued that "the inclusion of strong beer and packaged water brands, such as those of Carlsberg, in the beverage portfolio gives each of the brands in the portfolio greater market power than if they were sold on a 'stand-alone' basis."[35] The Commission also worried that economies of scale and scope were "key competitive factors" in the carbonated soft drink market and that the newly merged firm would take advantage of these efficiencies to the detriment of effective competition: "The distribution of CSDs is characterized by high economies of scale. In particular it is crucial to unload a sufficiently high volume at each truck stop to bring down the average cost of delivery to individual customers. Generally this means that companies with the highest volume and the broadest portfolio of beverages in their distribution system will have the lowest costs and be able to reach the highest number of customers."[36]

C. *Boeing/McDonnell-Douglas*[37]

In the *Boeing/McDonnell-Douglas* merger, the Commission again saw achieving both demand-side and supply-side economies of scope as leading to enhanced dominance by the merged firm: "Where a large fleet in service is combined with a broad product range, the existing fleet in service can be a key factor which may often determine decisions of airlines on fleet planning or acquisitions. Cost savings arising from commonality benefits, such as engineering spares inventory and flight crew qualifications, are very influential in an airline's decision-making process for aircraft type selections and may frequently lead to the acquisition of a certain type of aircraft even if the price of competing products is lower."[38]

In addition, the Commission feared that the sheer size and scope of the merged firm would lead to a strengthening of Boeing's dominant position in commercial airframe manufacture: "The

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[33] *Id.* at ¶ 99-100.

[34] *Coca-Cola/Carlsberg*, 1998 O.J. (L 145) 41-62 (Case No. IV/M. 833, September 11, 1997).

[35] *Id.* at ¶ 67.

[36] *Id.* at ¶ 66, 68.

[37] *Boeing/McDonnell-Douglas*, 1997 O.J. (L336) 16-47 (Case No. IV/M, July 30, 1997)

[38] *Id.* at ¶92.

doubling of governmental-funded military R&D and the tripling of Boeing's general revenues generated in the defense and space sector will increase the scope of cross-subsidization of Boeing's sales in commercial aircraft in cases where Boeing wants to meet specific competition.... It is clear that, as already stated, the addition of products from MDC (in particular the small-segment MD-95) and the large increase in its overall resources would enhance Boeing's opportunities to engage in such pricing practices, especially in view of its strong, and increasingly strengthening, cash-flow position as outlined above."[39]

D. GE/Honeywell[40]

The case that has brought the most attention to portfolio effects is, of course, the Commission's recent decision blocking the merger of General Electric and Honeywell. In that decision (which has not yet been published), the EC focused on all three economic avenues of harm: (1) That the merger would create opportunities for the merged firm to offer low-priced bundles of aircraft engines and systems to which narrow-line competitors would be unable to effectively respond; (2) That GE would leverage its existing dominance in aircraft engines into avionics and non-avionics systems markets by, among other things, bringing its "enormous financial means" to bear; (3) That GE's aircraft leasing arm (GECAS) would henceforth buy only (or at least heavily favor) Honeywell products, which would help create a dominant position for the merged firm in avionics and non-avionics systems markets in which Honeywell is currently active. The EC concluded that as result of these actions, revenue streams for GE and Honeywell competitors in both engines and avionics/non-avionics systems markets would shrink in the event of a merger, leading to a reduction in their future investment and their competitive vigor.

III. An Economic Analysis of the Use of Range Effects as a Basis for Prohibiting Non-Horizontal Mergers

In this Part, we discuss each of the three theories of competitive harm that come under the "range effects" rubric. With respect to the first theory, tying/bundling, we would agree that there is a theoretical possibility that, in certain limited circumstances, a merger might give the merged firm the ability and incentive to tie complementary products in a manner that might foreclose rivals and reduce competition. We believe, however, that even this theory requires a much more nuanced analysis than a simple assertion that the "dominant" or near-dominant firm will be able to gain further competitive advantage by bundling. The economic literature on tying and bundling does not support a presumption either that firms would necessarily tie or bundle complementary

[39] *Id.* at ¶78, 81.

[40] *General Electric/Honeywell* (Case No. IV/M. 2220)(Decision not yet published.)

products together, or that if they decided to do so this behavior would reduce welfare. Indeed, there are a number of circumstances in which tying/bundling serves to benefit the consumer through lower prices and improved products.

The other two theories of competitive harm -- that the merger will make the merged firm more efficient than its competitors, and a more generalized concern that the merged firm's size alone will give it a decisive competitive advantage -- lack any sound economic foundation whatever. Indeed, the more the merging firm's decisive advantage over its competitors comes from merger-generated efficiencies, the more difficult it is to argue that the merger would be harmful to consumers. Consumer welfare is generally improved by allowing merging parties to realize efficiencies. Lower costs typically translate into lower prices and increases in output in the markets directly affected. Cost savings also economize on the use of society's scarce resources, thereby freeing up more of these for use in the production of additional goods and services economy-wide. If there are truly economies to be realized by an increased scope of operations, we can also expect competitors to try to replicate the cost reductions by either teaming arrangements or counter-merger. For these reasons, blocking mergers under either of these two theories is almost certain to do more harm than good.

A. Tying and Bundling Theories

The terms "tying" and "bundling" themselves refer to a variety of economic phenomena, distinct in both their motivations and their effects.[41] Most stories of tying and bundling are not foreclosure-motivated, and only some of them are even foreclosure-related, and even the foreclosure-related tying/bundling stories have ambiguous welfare effects.

In the most straightforward models, tying from a monopoly market to a competitive, constant-returns-to-scale market is pointless, since the rents that can be extracted are not increased by such a move -- there is only "one monopoly rent" to take on the combined package, and that can be extracted from the existing monopolized market.[42] This led some adherents of the so-called "Chicago School" to conclude that most tying arrangements are unlikely to harm consumer welfare, and, where observed, are more likely to enhance it. In recent years, however,

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[41]Generally, "tying" means making the purchase of one (desired) good conditional on purchase of another (less desired) good and therefore has an element of coercion. "Bundling," on the other hand, generally means offering a package of complementary goods at a discount from the prices for individual goods. If the individual components are also sold separately from the bundle, it is generally termed "mixed bundling," as opposed to "pure bundling," in which individual components are not offered separately. Bundling strategies sometimes can be distinguished from tying strategies by their lack of a substantial market power requirement. Bundling and tying may be either of the technological (complementary products are physically integrated) or contractual variety.

[42]*See, e.g.*, Aaron Director & Edward H. Levy, *Law and the Future: Trade Regulation*, NW. U. L. Rev. 51 (1956).

economists have begun had the opportunity to examine tying and bundling more closely. They have identified a number of different strategic reasons for tying and bundling — some of which are likely to benefit consumers while others may reduce consumer welfare. Each strategy is discussed in turn below.

1. Efficiency

Bundling may be undertaken for genuine efficiency reasons, resulting in a superior product from the customer's point of view. If economies of scope mean that costs of producing and selling a bundle of complementary goods are lower than the costs of producing and selling individual components separately, a significantly lower bundled price may simply reflect these efficiencies. Even where there are no economies of scope, when two producers of complementary products merge they may offer a lower price for a bundle of those products because the merger solves a "double-marginalization" problem, thus enhancing allocative efficiency. (This is the so-called "Cournot effect" which arises because a merger of two firms making complementary products causes the merged firm to internalize the externalities associated with its pricing decisions.) This pricing efficiency is all the more likely in those instances where the merging firms had been exercising a degree of market power before the merger. In addition to these supply-side efficiencies, bundling may also be desired by the customers because it serves to reduce transactions costs through so-called "one-stop shopping."

In the unusual event narrow-line firms are unable to replicate these efficiencies through teaming arrangements, internal growth, or counter-merger, they could contribute to the foreclosure of these firms. To the extent that rivals are foreclosed from the market due to efficiencies, it is conceivable that a merger creating these efficiencies could end up harming consumers. It is important to keep in mind, however, that the competitive process is largely about encouraging the more efficient to grow at the expense of the less efficient. This process generally inures greatly to the benefit of the consuming public. Firms are rewarded for cutting costs (thereby saving on society's scarce resources), lowering prices, and in the process displacing their less efficient rivals. Antitrust authorities should be appropriately cautious about intervening because of a fear that this may occur. Competition sometimes means that inefficient firms are driven out of business, and even if firms are foreclosed by a now more efficient rival, the post-foreclosure price charged by this more efficient (merged) firm could easily be lower than the pre-foreclosure, no-efficiencies price as the merged firm responds to its lower costs by offering consumers better terms.

2. Price Discrimination

Tying and bundling can also serve as a device for price discrimination. By offering a bundle as part of the overall mix of options offered to consumers, a firm may be able to smooth out variability in demand and capture more consumer surplus. This smoothing-of-demand effect is strongest when consumers' values of the products are negatively correlated, though it can also exist with no correlation or even positive correlation between consumers' valuations of the goods.

Economists agree that price discrimination generally has ambiguous welfare consequences: on the one hand, it may increase output by serving consumers that would otherwise have been excluded from the market; on the other hand, consumers with relatively inelastic demand will likely face a higher price if price discrimination occurs.

3. Product Differentiation

A firm may bundle its product with a complement in order to soften competition in the market by increasing product differentiation between its product and those of its rivals. Bundling in this case increases the profits of all participants in the market relative to a component-by-component competition.[43] An easy way to detect whether softening competition is the motivation for bundling is to look at competitors' reactions to the bundle: If competitors are complaining about the possibility, we can be pretty sure that it is not serving to soften competition.

4. Tying as an Exclusionary Strategy

Whinston and others have shown that tying may serve an anticompetitive purpose if it changes the market structure of the tying product industry by inducing exit, deterring entry, or causing competitors to pull back their R&D spending.[44] By committing to a tie, the firm commits itself to compete aggressively, since in order to make any profits on its monopoly product, it must sell the bundle. This means it will be willing effectively to sell the tied product at a loss, which it would not do in component versus component competition. By committing itself to compete aggressively, the firm makes it less likely that rival firms will pay the fixed cost of entering or maintaining their market position. Even in the Whinston model, however, the welfare implications of tying are ambiguous, both for consumer and total welfare. Consumers are harmed both by the price effect of exclusion and by the loss of variety in the tied product market, but can possibly be made better off if the net price effect, even after exclusion, is still negative. Moreover, the most prominent version of Whinston's widely cited theory emphasizes that the tying firm must be able credibly to commit not to "untie" or "unbundle" should entry occur (or should rivals remain), in order to achieve an anticompetitive outcome. This requirement presents yet another hurdle for those citing it in support of pre-merger intervention. Even the proponents of this theory of competitive harm caution, therefore, that:

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[43]Models of this variety are developed by Yongmin Chen as well as Jose Carbajo, David de Meza, and Daniel Seidman. Yongmin Chen, *Equilibrium Product Bundling*, J. Bus. 70(1), 85 (1997); Jose Carbajo, *et al.*, *A Strategic Motivation for Commodity Bundling*, J. Indus. Econ. 38(3), 283 (1990).

[44]Dennis W. Carlton & Michael Waldman, *The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries* (December 1998) (unpublished manuscript available from National Bureau of Economic Research as working paper W6831); Michael Whinston, *Tying, Foreclosure, and Exclusion*, Am. Econ. Rev. 80(4), 837 (1990); *see also*, *United States v. Microsoft*, 253 F.3d 34, 87 (D.C. Cir. 2001).

> [T]rying to turn the theoretical possibility for harm . . . into a prescriptive theory of antitrust enforcement is a difficult task. For example, the courts would have to weigh any potential efficiencies from the tie with possible losses due to foreclosure which by itself is challenging due to the difficulty of measuring both the relevant efficiencies and the relevant losses. . . . [O]ne reason this is difficult is that, as discussed in our various analyses, even focusing solely on foreclosure can yield ambiguous results concerning how tying affects social welfare. That is, there are some situations in which tying used for foreclosure can actually increase social welfare.[45]

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Given the range of possible motivations for, and competitive consequences of, bundling, it is extremely hazardous to adopt a policy prohibiting mergers merely on the ground that the ability and incentive to engage in these practices might be increased by the merger. Were such a policy to be adopted, at a minimum two fundamental questions should be asked and answered affirmatively before blocking any merger on such a theory: (1) would the firm engage in bundling after the merger?; and, if so, (2) would the bundling strategy harm consumer welfare? Answering each of these questions requires a careful identification of the economic theories involved and the examination of case-specific evidence on both sides of the ledger, including ways in which efficiencies will benefit consumers or motivate other firms to become more efficient.

The difficulty of answering these questions *ex ante* argues strongly in favor of waiting until after the tie has occurred to consider challenging this type of conduct, since waiting yields important advantages in investigating both of these questions -- the first question is already resolved at that point, and more evidence on the second question is available, even if it is not definitive. A decision about whether to prohibit a merger because of potential range effects must therefore weigh the costs and benefits of waiting until after the merger to prosecute any illegal behavior. If the decision is made to stop tying/bundling behavior at the point of incipiency, it makes sense to do so only when the facts clearly demonstrate a real likelihood of foreclosure of rivals due to tying or bundling behavior that is not efficiency-enhancing.

B. The"Efficiencies Offense"

There is no sound basis for blocking a merger on the grounds that the merger will produce a more efficient competitor. Using an efficiency-based harm as the basis for a range effects case assumes that antitrust authorities have the knowledge to make the distinction between efficiencies that lead to consumer benefit and the rare cases of efficiencies that upset the balance of competition to the ultimate detriment of most consumers. It is difficult to think of a historical example in which an efficiency-enhancing merger has actually led to consumer harm, and thus hard to imagine basing antitrust policy on an "efficiencies offense." While there is some small possibility that a combination that foreclosed rivals solely on the basis of merger-related

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[45] Carlton & Waldman, *supra* note 40, at 33.

efficiencies could have a net adverse effect on welfare, the vast majority of such mergers are likely to be welfare improving. It seems extremely unlikely that welfare (either total or consumer) could be promoted by a policy of barring such mergers based on the kind of evidence likely to be available while the merger is still incipient.

C. "Big is bad"

Many range effects cases, seem to simply assume that the merged firm will gain a decisive advantage simply due to its size. While size may be an advantage in some circumstances, it is wrong and dangerous to assume that bigger equals more powerful, or that access to "deep pockets" will necessarily allow a firm to outspend its opponents and win contests for market share.

Empirically, we know that the biggest firm — the one with access to the most internally generated funds — will not always, or even most of the time, win critical competitions. Counter-examples include the competition between IBM and Microsoft in developing a successor to the DOS operating system at a time when the market capitalization of IBM dwarfed that of Microsoft. Another example is the case of General Motors' long, slow decline in market share relative to its U.S. competitors, though it has always been much larger than Ford or Chrysler.

One reason that bigger does not necessarily equal more powerful is that capital is fluid, and flows to good opportunities. For instance, the personal computer hardware industry today is characterized by companies like Compaq, Dell, Gateway, IBM, and Apple. Only one of these firms existed 26 years ago, and it was a behemoth that dominated mainframe computer hardware, software, and service. Twenty-six years later, IBM is at best third in this group in worldwide PC market share, with only about 7 percent of the total market.[46]

Certainly, there are advantages in particular industries to a firm being large. But generally there are disadvantages as well as advantages to being big, a fact that motivates many spinoffs. The disadvantages are less straightforward, and tend to be ignored when building a range effects case.

Finally, one should not forget that, to the extent there are economies of scale and scope in an industry, bigger means lower costs. Thus, often in the case where bigness does have an effect on competition, it will be for efficiency reasons, and not anticompetitive ones.

D. Conclusion

The basis for a "range effects" merger challenge is tenuous at best. If range effects are ever to become an effective basis for a merger challenge, the economic underpinnings of any

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[46] John G. Spooner, *Studies: PC Sales Down, But Could Be Worse*, CNETnews.com, July 19, 2001.

tying/bundling theories must be carefully considered, and distinctions must be made between efficiencies-based and any non-efficiencies-based foreclosure. Without that, range effects theory runs the risk of becoming an ill-defined, catch-all theory that allows antitrust regulators to challenge virtually any merger on the basis of vague fears of "dominance." Such an arbitrary policy stands to both increase uncertainty about antitrust enforcement and potentially deter a large class of efficient mergers. It would represent a step backwards in the evolution of antitrust policy, which has generally been towards more clearly-defined, economics-based enforcement criteria aimed at enhancing consumer welfare.

IV. A Case Study: Range Effects in the GE/Honeywell Merger

After conducting over 75 interviews of industry participants, deposing the executives of the merging parties, and reviewing the responses of numerous requests for documents and information from third-parties, the Department of Justice concluded that there was no evidence to support a challenge of the *GE/Honeywell* merger on the basis of range effects.[47] The European Commission decided otherwise. It is instructive to use the *GE/Honeywell* matter as a case study on range effects because the two antitrust agencies reached fundamentally different conclusions despite analyzing the identical product and geographic markets, hearing the same arguments from parties and third-parties, considering the same theories of competitive harm, and largely having access to the same set of facts.

A. *GE's alleged dominance in large aircraft engines*

The theories of competitive harm relied heavily on the claim that GE was already dominant in the market for large aircraft engines. We found little support for that argument. Under U.S. law, a firm must have "the power to control prices or exclude competition"[48] in order to be found to have market power or to be "dominant." While GE currently enjoys a large market share (due largely to its position through its CFMI joint venture with SNECMA as the exclusive supplier of engines for the Boeing 737), we concluded that the market for large aircraft engines is a bid market with three strong competitors — GE, Rolls Royce, and Pratt & Whitney. In such a market, historic market shares are only weakly indicative of future success, as illustrated by the fact that recent contract awards have been quite evenly divided among the three firms, with GE winning 42%, PW 32%, and Rolls Royce 27% (even including CFMI engines in GE's share).[49]

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[47] The Department did, however, require the parties to agree to divest Honeywell's military helicopter engine business and to authorize a third-party provider for heavy maintenance, repair and overhaul services for certain Honeywell aircraft engines and auxiliary power units, in order to resolve competitive concerns in those markets.

[48] *United States v. E.I. duPont de Nemours & Co.*, 351 U.S. 377, 391 (1956).

[49] These figures are based on order information for the first half of 2001 contained on the following websites: active.boeing.com/commerical/orders/customquery.cfm and www1.airbus.com.

We could see no basis, therefore, for finding that GE would be able impose restrictions on its engines customers (for example, by tying Honeywell avionics to its engine sales) without disadvantaging itself in its battle against Pratt & Whitney and Rolls Royce to have its engines selected on future platforms. And, in the case of CFMI engines, GE's ability to impose such restrictions would be further constrained by its joint venture partner, SNECMA, who would gain nothing from such restrictions.

B. *The leveraging theory*

We were also unpersuaded that GE would be able to leverage its strong position in engines to gain a decisive competitive advantage in the markets for avionics and non-avionics systems through either mixed bundling or technological tying. The mixed bundling theory of competitive harm used the so-called "Cournot effect" to predict that the merged firm would lower the price of complementary goods because it would internalize the external effects of its prices on sales of the complementary goods it now controls.[50] That is, the firm adjusts its pricing to reflect the fact that if it lowers the price of its product A, it will stimulate sales of product B, if B is a complement of A.

It is important to emphasize that this theory predicts that the merged firm's prices will go down post-merger, at least in the short run. Harm occurs only if competitors lose profits *and* are forced to withdraw from the market. Thus, while the benefits are certain and immediate, the predicted harm is much more distant and speculative.

The empirical evidence we examined convinced us that mixed bundling, to the extent it may be practiced in aerospace markets, is unlikely to convey a decisive competitive advantage. We found little, if any, evidence that aerospace suppliers have been able to gain significant market share through bundling tactics in the past. With respect to technological tying, we could likewise see no way to determine, *ex ante*, whether physically integrating engines and avionics/non-avionics systems together would have any foreclosure effect, much less whether any potential foreclosure effect would outweigh the efficiencies that might be produced by such integration.

Even assuming *arguendo* that bundling conferred a competitive advantage, we were unable to find any evidence suggesting that other firms would be unable to match the merged firm's offerings through teaming arrangements of the type that are common in this industry. This was exactly what the EC found when it examined the *AlliedSignal/Honeywell* decision just one year earlier: "There is scope for competitors to extend their product range, either via internal development of products or by "teaming" with other competitors," citing several examples where

[50]This competitive harm theory was based in large part on models derived from earlier work by Barry Nalebuff, professor of economics and management at Yale University. In a recent paper, Nalebuff has shown that those models do not apply in aerospace and avionics industry. Barry Nalebuff & Shihua Lu, *A Bundle of Trouble — Bundling and the GE-Honeywell Merger* (October 2001) (not yet published but on file with the authors).

commercial teaming had been successful in the market for avionics.[51] We found a number of similar examples in the market for large commercial engines.[52] We also could not believe that large, sophisticated buyers, like Boeing and Airbus, would permit GE/Honeywell to monopolize the market for such important aircraft components as engines and avionics.

C. *Alleged Anticompetitive Effects of GECAS*

We also examined the claim that GE uses its aircraft leasing arm, GE Capital Aviation Services ("GECAS"), to gain an advantage in engine competitions and would be likely, post-merger, to use GECAS similarly to expand Honeywell's market share for avionics and non-avionics systems. This was characterized as vertical foreclosure by some involved in the matter, but it is really just a range effect because the claim was based on the fear that the merged firm would tie the availability of GECAS financing to the purchase of engines and avionics/non-avionics systems.[53] We concluded that GECAS's share of aircraft purchases — less than 10% of all planes worldwide — was too small to give rise to a significant foreclosure effect. This being the case, to the extent GECAS is shifting share towards GE by offering more attractive financing deals than its competitors, GE is simply discounting its engines, and it is unclear why GE's competitors should not be able to match these discounts.[54]

D. *Likelihood that rivals will exit*

All of the theories of consumer injury from the *GE/Honeywell* merger were dependent on the argument that the merger ultimately would drive competitors from the market or would decrease their shares to a point where they could no longer effectively constrain GE's competitive behavior. This argument was critical to consumer injury because prices could rise only after GE's

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[51]*AlliedSignal/Honeywell*, (Case No. Comp/M.1601, January 12, 1999) ¶ 118.

[52]Indeed, GE's leading market share in large aircraft engines is largely attributable to its successful CFMI joint venture with the French company, SNECMA. GE also has entered a joint venture with Pratt & Whitney to develop engines for Airbus' A3XX and the B747 that Boeing is considering launching. In addition, Rolls Royce and Pratt & Whitney have formed a joint venture — IAE — to develop, among other things, an engine which IAE has contracted to supply to Airbus for A319.

[53]This theory also is reminiscent of cases brought in the 1960s challenging conglomerate mergers on the grounds that they would facilitate anticompetitive reciprocal dealing. *See, e.g.*, *FTC v. Consolidated Foods Corp.*, 380 U.S. 592 (1965). Like entrenchment, this theory has been criticized and today would be pursued only where there would be a significant foreclosure effect.

[54]The U.S. briefly flirted with a theory that tying financing to the purchase of products could be anticompetitive but this theory was flatly rejected by the Supreme Court in *United States Steel Corp. v. Fortner Enterprises*, 429 U.S. 610 (1977). *See also*, V Areeda & Turner, *supra*, ¶1105e, at 19 ("To make credit available to buyers who desire it is to offer a better product. To make it available at a lower cost is to sell that better product at a lower price, and that is clearly a social benefit.").

competitors were either forced to exit or could no longer compete effectively.

We found no evidence supporting the notion that competitors would not be able to keep up or would be forced to exit as a result of the merger. GE's and Honeywell's rivals are mostly large, financially healthy companies with large shares in many of the relevant markets and ready access to capital. Since the engines and avionics and non-avionics systems have already been selected for all existing airframe platforms, and since very little or no new platform competition is expected in the near term, these competitors have an assured revenue stream for many years and any exit scenario seemed wholly implausible. We found no historical evidence of aerospace firms exiting or withdrawing from the market because they could offer only a narrow range of products, other than through mergers which kept their productive assets in the market.

E. *Conclusion*

In summary, we found no factual support for any of the key elements of the range effects theories of competitive harm with respect to the *GE/Honeywell* merger. To the contrary, we concluded that to the extent those theories were based on the argument that the merged firm would have the ability and incentive to offer customers lower prices and better products, that meant the merger should benefit customers both *directly* -- through the lower prices and better products offered by the merged firm -- and *indirectly* -- by inducing rivals to respond with their own lower prices and product improvements. That, in our view, was a reason to welcome the merger, not condemn it.

Bibliography

Areeda, Phillip E. and Donald F. Turner. *Antitrust Law*. Boston: Little, Brown and Company, 1980.

Bakos, Yannis and Erik Brynjolfsson. "Bundling Information Goods: Pricing, Profits, and Efficiency." Mimeo, April 1998.

Bork, Robert H. *The Antitrust Paradox*. New York: The Free Press, 1978.

Carbajo, Jose, de Meza, David, and Daniel Seidman. "A Strategic Motivation for Commodity Bundling," *The Journal of Industrial Economics* 38(3), 1990.

Carlton, Dennis W. and Michael Waldman. "The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries." National Bureau of Economic Research, December 1998.

Chen, Jim. “The Legal Process and Political Economy of Telecommunications Reform.” 97 *Columbia Law Review* 835, 1997.

Chen, Yongmin. “Equilibrium Product Bundling.” *Journal of Business* 70(1), 1997.

Choi, Jay P. “Preemptive R&D, Rent Dissipation, and the “Leverage Theory.” *The Quarterly Journal of Economics*, 1996.

Choi, Jay P. “Tying and Innovation: A Dynamic Analysis of Tying Arrangements.” Mimeo, May 1998.

Custatis, P., Miles, and Woolridge. “Restructuring Through Spinoffs: The Stock Market Evidence.” *Journal of Financil Economics* 33, 293, 1993.

Director, Aaron and Levy, Edward H. “Law and the Future: Trade Regulation.” *Northwestern Law Review* 51, 1956.

Economides, Nicholas and Steven Salop.“Competition and Integration Among Complements and Network Market Structure.” *The Journal of Industrial Economics* 40(1), 1992.

Grimm, Curtis, Winston, Clifford, and Carol Evans. “Foreclosure of Railroad Markets: A Test of Chicago Leverage Theory.” *Journal of Law and Economics*, 1992.

Joffe, Robert D., Kolasky, McGowan, Mendez-Penate, Edwards, Ordover, Proger, Solomon, and Toepke, “Proposed Revisions of the Justice Department’s Merger Guidelines,” 81 *Columbia Law Review* 1542, 1569-70 (1981).

Matutes Carmen, and Riegebeau, Pierre. “Compatability and Bundling of Complementary Goods in a Duopoly.” *The Journal of Industrial Economics* 40(1), 1992.

McAfee, R. Preston, McMillan, John, and Michael Whinston. “Multiproduct Monopoly, Commodity Bundling, and Correlation of Values.” *The Quarterly Journal of Economics*, 1989.

Muris, Timothy. “The FTC and the Law of Monopolization.” 67 *Antitrust Law Journal* 693, 2000.

Nalebuff, Barry. “Bundling.” Yale ICF Working Paper No. 99-14, 1999.

Nalebuff, Barry. “Competing Against Bundles.” Yale School of Management Working Paper #7, 2000.

Barry Nalebuff & Shihua Lu. “A Bundle of Trouble — Bundling and the GE-Honeywell Merger.” Not yet published but on file with the authors, October 2001.

David J. Ravenscraft and F.M. Scherer, “The Profitability of Mergers.” International Journal of Industrial Organization 7, 101, 1989.

Schmalensee, Richard. “Pricing of Product Bundles.” *Journal of Business* 57(1), 1984.

Schmalensee, Richard. “Commodity Bundling by Single Product Monopolies.” *Journal of Law & Economics* 25, 1982.

Sobel, Robert. 1999. *The Rise and Fall of the Conglomerate Kings.* Washington, DC: Beard Books.

Spooner, John G. “Studies: PC Sales Down, But Could Be Worse.” *CNETnews.com*, July 19, 2001.

U.S. Department of Justice Merger Guidelines. 33 Fed. Reg. 23, 442, reprinted in 4 Trade Reg. Rep. (CCH) ¶ 13, 101, 1968.

U.S. Department of Justice & Federal Trade Commission Horizontal Merger Guidelines. 4 Trade Reg. Rep. (CCH) ¶ 13, 104, 1992 and revised 1997.

Whinston, Michael. “Tying, Foreclosure, and Exclusion.” *American Economic Review*, 80(4), 1990.