Prepared Remarks of

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My topic today is merger enforcement at the Federal Trade Commission -- the review of mergers and acquisitions to determine whether they are likely to harm competition and therefore should be challenged under the antitrust laws.¹ I will begin by describing recent developments in our merger enforcement activities since the issuance earlier this year of the Horizontal Merger Guidelines by the Commission and the Department of Justice. I will then offer a few observations on competition in innovation, an issue that is critical to our international competitiveness and that in my view requires analytical flexibility on the part of those responsible for applying the Guidelines.

Merger enforcement is a significant part of the Commission's overall antitrust program, which aims to prevent activities that harm the competitive process and thereby harm consumers. Economically sound merger enforcement serves two important, and related, goals. First, it protects consumers from higher prices, diminished quality and innovation, and other potential effects of anticompetitive mergers. At the same time, the clear articulation -- and consistent application -- of merger

¹ These remarks do not necessarily represent the views of the Commission or any other Commissioner.
enforcement policy facilitates business planning and allows legitimate transactions to proceed unimpeded.

To put our merger enforcement activities in perspective, in recent years the Commission has received between 1,500 and 1,600 premerger notification filings annually under the Hart-Scott-Rodino Act, of which roughly two percent required in-depth investigation by the Commission, including the issuance of requests for additional information. Some of these cases result in enforcement action in the form of a negotiated consent order or litigation brought by the Commission to prohibit the transaction. But the overwhelming majority of reported transactions are quickly reviewed and allowed to proceed. These statistics suggest that businesses and their antitrust advisers usually are able to anticipate when a proposed transaction is likely to raise competitive concerns with the antitrust agencies, and either refrain from attempting such a transaction or structure it to avoid competitive problems.

The Horizontal Merger Guidelines that were jointly released in April 1992 by the Commission and the Department of Justice provide a framework for assessing the competitive effects of a merger, incorporating developments in economic analysis of mergers that had occurred since the issuance of the agencies'...

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2 See Horizontal Merger Guidelines, § 0.1 ("While challenging competitively harmful mergers, the [Commission and Department of Justice seek] to avoid unnecessary interference with the larger universe of mergers that are either competitively beneficial or neutral").
earlier guidelines3 while remaining consistent with the major themes of those guidelines.4 As a result, the 1992 Guidelines should further both of the goals of merger enforcement that I mentioned a moment ago, improving our ability to identify and prohibit potentially anticompetitive mergers and easing the way for transactions that are procompetitive or competitively benign.

Commission Merger Enforcement Under the 1992 Guidelines

The three merger enforcement actions taken by the Commission since the new Guidelines were adopted are indicative of the range of issues that arise in contemporary merger analysis, and of the Guidelines' flexibility in dealing with a variety of competitive conditions.

To an antitrust specialist, the name Von's Grocery evokes the 1966 case in which the Supreme Court found illegal a merger between grocery chains in the Los Angeles area having a combined market share of less than eight percent -- a case that some regard as the high water mark for judicial condemnation of mergers involving what today would be regarded as relatively low


levels of market concentration.5 Earlier this year, the Commission took action in a case bearing the Vons name that should be more successful than its namesake in withstanding the test of time.6

The 1992 Vons case involved allegations of competitive harm that fall within the mainstream of both pre- and post-1992 Guidelines merger analysis. According to the Commission’s complaint, Vons sold its existing grocery store capacity in San Luis Obispo, California, to a firm that intended to operate the capacity in a different relevant product market -- i.e., as a drug store rather than a grocery store. In a second transaction, Vons acquired the grocery capacity of Williams Brothers, a major competitor. The complaint alleged that these transactions were inextricably related -- that each would not have been undertaken by Vons in the absence of the other. These transactions occurred in a market where entry was alleged to be difficult. The transactions allegedly resulted in Vons increasing its market share to approximately 50 percent, and reduced both the number of competitors and the amount of capacity in the relevant market, making coordinated interaction among the remaining competitors significantly more likely.


6 The Vons Companies, Inc., C-3391 (September 1, 1992) (consent order).
An important allegation underlying the theory of competitive harm was that Vons sold its supermarket capacity for use as a drug store for a lower price than had been offered to Vons by firms that would have operated the store as a supermarket. A firm might rationally sacrifice short-run gains in the form of a higher price for its assets if in so doing it would be able to exercise market power. Viewing the two interrelated transactions as one, the economic effect of the transaction was equivalent to that of a horizontal acquisition between Vons and Williams Brothers -- indeed, the potential for anticompetitive effects was greater than would be the case with a simple horizontal acquisition, because the transactions not only increased market concentration but also reduced market capacity. In terms of fundamental economic analysis, then, the allegations in Vons are not particularly novel.

In terms of legal analysis, however, the Vons case is more distinctive. Vons sold its existing store before acquiring the Williams Brothers stores, so viewed at the instant of the second transaction, there was no horizontal overlap. But the Commission alleged that the two transactions were inextricably linked and that Vons always intended to remain in the grocery business in the relevant geographic market. The Commission's complaint accompanying the consent order charged violations of both section 5 of the FTC Act and section 7 of the Clayton Act, reaffirming
that the overall competitive impact of such transactions are subject to the Commission’s review.\footnote{Commissioner Azcuenaga concurred in accepting the consent agreement on the basis of section 5 of the FTC Act, but did not reach the question whether section 7 of the Clayton Act applied.}

The second merger enforcement action taken by the Commission since the new Guidelines were adopted involved a more straightforward horizontal acquisition, in which Dentsply International, Inc. proposed to acquire certain dental supply assets of Johnson & Johnson. According to the Commission’s complaint, Dentsply and J&J are competitors in the United States in a product market consisting of premium silver alloy, defined as products "perceived to be of high quality and consistency" that are used by dentists in the treatment of cavities. The complaint alleged that the relevant market was highly concentrated, entry was difficult, and the acquisition would increase the likelihood of collusion. The Commission accepted for public comment a consent order requiring Dentsply to divest its assets in the relevant market.\footnote{Dentsply International, Inc., FTC File No. 921-0084 (October 8, 1992) (proposed consent order). Commissioner Azcuenaga concurred in the decision to accept the proposed consent but stated that relief should also have been sought in a second market, the pit and fissure sealant market. Commissioner Owen voted to accept the consent and issued a statement explaining why she believed the Commission had correctly decided not to challenge the acquisition in the pit and fissure sealant market.}
A noteworthy aspect of the Dentsply case is the nature of the alleged product market, which is defined based in part on customer perceptions that certain products are distinctive in terms of quality and consistency. Customer perceptions can come into play under the Guidelines in several phases of the analysis of a merger. In terms of product market definition, the question may be whether functionally similar products having varying degrees of reputation or customer acceptance are in the same or different markets. If, for example, a sufficient number of customers perceive certain products to be of high quality and would not switch to products that are not so perceived in response to the Guidelines' hypothetical five percent price increase, making the price increase profitable, this would be indicative of separate product markets. Customers may be particularly unlikely to switch to products they perceive to be of lower quality where the product is an important input into goods or services provided by the customers in downstream markets, but accounts for a small proportion of the cost of those goods or services.

Similarly, the likelihood of production substitution may depend on how quickly, and with what level of sunk costs, firms may be able to attain the degree of reputation and customer acceptance necessary to have a competitive impact in a market defined by those characteristics. Under the Guidelines, firms that are likely to begin supplying the relevant market within one
year, without the expenditure of significant sunk costs of entry and exit, are included in the relevant market and assigned a market share (§ 1.32). The Guidelines note that sunk costs (costs not recoverable through redeployment outside the relevant market) may include market-specific investments in, among other things, marketing and product acceptance. Promotional and other costs attendant to achieving market acceptance of a branded product are good examples of sunk costs, so that the central question in evaluating supply substitution will often be whether such costs can be recouped within one year. Developing reputation and customer acceptance can involve substantial sunk costs, particularly where extensive customer-specific promotional efforts are required.

In the case of markets defined in part by reputational or customer qualification requirements, an important question in assessing entry will often be whether the entrant can attain, in a timely manner, the level of customer acceptance necessary to achieve minimum viable scale and be profitable in such a market. The Guidelines require that entry would be timely, likely, and sufficient to deter or counteract the merger’s anticompetitive effects (§ 3). Entry is timely if it would occur within two years, taking into account all phases of entry necessary to attain a significant impact in the market, from initial planning.

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9 Sunk costs are deemed "significant" if they would not be recouped within one year of the supply response, assuming a five percent price increase lasting one year.
through satisfaction of customer qualification requirements. Entry is likely if it would be profitable at premerger prices. This in turn requires an examination of whether the sales opportunities available to an entrant after the merger, including an anticompetitive output reduction resulting from the merger, would be sufficient to enable the entrant to attain the minimum scale necessary to be profitable, termed minimum viable scale. High promotional and marketing costs may require an entrant to capture a sizeable market share in order to recover its costs and be profitable, and if the requisite share exceeds the likely sales opportunities available to the entrant, entry is unlikely to occur.

The most recent Commission merger enforcement action involved Alliant Techsystems Inc.'s proposed acquisition of Olin Corporation's Ordnance Division and other assets. Alliant and Olin are the only two firms providing 120 millimeter tank ammunition to the U.S. Army, the sole domestic customer. The Commission found reason to believe the acquisition would lessen competition, and authorized its staff to seek a preliminary injunction blocking the acquisition pending a Commission administrative proceeding.

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10 Alliant Techsystems Inc., FTC File No. 921-0089 (November 5, 1992) (preliminary injunction authorized). The Commission vote to authorize the preliminary injunction was 4-1, with Commissioner Azcuenaga dissenting.
Two weeks ago, the U.S. District Court for the District of Columbia granted the Commission’s motion for a preliminary injunction, finding that the Commission had demonstrated a substantial likelihood of success on the merits. The court noted that Alliant and Olin each supply about half of the Army’s current procurement of 120 millimeter tactical and training ammunition, and each firm is responsible for one of the two advanced tactical rounds now under development. The court found that these products, together with the related services the companies provide, constitute a single relevant market.

Prior to the announcement of the merger, the Army had determined that, due to shrinking defense budgets and projections of continuing post-Cold War decline in demand, it would select a single supplier of 120 millimeter tank ammunition for future years. The Army announced its intention to hold a competitive, winner-take-all bid for a five-year procurement in order to select a single supplier. Thereafter, Alliant and Olin began discussing a merger of their ammunition businesses, which would eliminate competition between the two firms in a competitive bid.

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12 Supplemental Memorandum at 17-18.

13 Supplemental Memorandum at 5-6.
The court found it reasonable to infer from the evidence that by eliminating all competition for the upcoming five-year procurement contract, the acquisition would enable the parties to control prices, and raise the cost of the contract by between $25 million and $115 million. The court found that the acquisition would give the parties a complete monopoly in the relevant market, both for purposes of the Army's upcoming procurement of 120 millimeter ammunition in a five-year contract covering 1994-98, and for the foreseeable future thereafter. Entry, either by the Army itself or a third party, was found to be too costly and time-consuming to be likely to prevent or restrain the combined firms from exercising market power. These findings were sufficient in the view of the court to justify a preliminary injunction.

The parties had raised several arguments in defense of the acquisition. One argument was that competitive bidding between Alliant and Olin would cause the Army to incur additional costs, risks of product failure, delays and uncertainty in obtaining the two types of advanced tactical rounds that are under development by Alliant and Olin, respectively. This argument was based in large part on difficulties that assertedly would be involved in transferring technology and expertise from one firm to the other.

14 Supplemental Memorandum at 20-21.
15 Supplemental Memorandum at 20.
16 Id.
The court characterized these concerns as efficiency arguments, and found that they were "speculative at best," noting that the Army as an institution had not found them sufficient to intervene in the litigation and urge that the acquisition be allowed to proceed.\textsuperscript{17} The court noted that although two Army officials testified that they preferred that the acquisition take place, the Army as an institution indicated only that it had "no objection" to the acquisition and took "no official position concerning the antitrust implications of the transaction."\textsuperscript{18} Rather, the Army indicated that absent the acquisition it would proceed with its original plan to select a single supplier through a competitive bid, and determined that both Alliant and Olin were qualified to produce all types of 120 millimeter tank ammunition, including both types of advanced tactical rounds.\textsuperscript{19} The court concluded that:

the additional intangible costs of a competitive bid, if any, would not significantly outweigh those of a merger. They do not outweigh the public interest deficits likely to follow from preclusion of competition, the 100 percent monopoly, and the significant price increase which probably would result from the merger.\textsuperscript{20}

\textsuperscript{17} Supplemental Memorandum at 21.

\textsuperscript{18} Supplemental Memorandum at 11, 27.

\textsuperscript{19} Supplemental Memorandum at 11-12, 26.

\textsuperscript{20} Supplemental Memorandum at 21-22.
The court also rejected the argument that the Competition in Contracting Act\textsuperscript{21} ("CICA") precluded issuance of a preliminary injunction, noting that the CICA was enacted to promote competition in military procurement where possible, and that statutory exemptions to competition should be narrowly construed. The court held that the parties failed to demonstrate that the acquisition fell within the scope of an exemption, and that, in any event, the only party authorized by statute to exempt procurement from competition was the Army -- which originally planned to proceed with a competitive bid -- and not private parties seeking to merge.\textsuperscript{22}

Finally, the parties contended that the Army could protect itself against any anticompetitive effects from the acquisition through oversight measures contained in federal contracting regulations. The court found that "[t]here is persuasive opinion in the record that Army oversight, while effective, is an imperfect substitute for the action of the competitive market."\textsuperscript{23}

**Emerging Challenges in Merger Analysis**

These merger cases brought since the issuance of the 1992 Guidelines suggest, among other things, that merger analysis must

\textsuperscript{21} 10 U.S.C. § 2304.

\textsuperscript{22} Supplemental Memorandum at 22-24.

\textsuperscript{23} Supplemental Memorandum at 8.
be flexible if it is to accommodate the diversity of transactions and markets that the antitrust agencies are called upon to examine. With respect to price competition in existing markets, the 1992 Guidelines provide an excellent and comprehensive analytical framework for analyzing how a merger may create or enhance market power.\textsuperscript{24} Price competition is more readily assessed than other forms of competition, given the tools of analysis we possess and the market facts that ordinarily are available.

However, with respect to non-price competition, the Guidelines' analysis is less fully developed. The Guidelines do explicitly recognize that mergers also may lessen non-price competition in areas such as quality, service, and innovation (§ 0.1 n.6), but they provide relatively less guidance for the assessment of these issues.

I would like to use my remaining time to focus on a particularly important type of non-price competition --

\textsuperscript{24} For example, the Guidelines essentially carry forward their predecessors' approach to market definition, which is based on buyers' likely reactions to a hypothetical increase in the price of the products in the putative market. This approach brought greater analytical rigor to market definition, which can be the decisive issue in analyzing a merger. More fundamentally, the central issue that the Guidelines seek to determine -- whether a merger is likely to create or enhance market power -- is expressly cast in price terms. The Guidelines state that "market power to a seller is the ability profitably to maintain prices above competitive levels for a significant period of time" (§ 0.1).
innovation --, to offer some observations on how the framework of the 1992 Guidelines can serve in the analysis of this issue, and to suggest some avenues for further thought and exploration.  

To begin, why is an analysis of innovation competition so important? First, we find increasingly that the cases that we review -- both merger and non-merger -- raise issues about whether the conduct involved might either reduce or enhance competition in innovation. Rapid change characterizes many industries. The most prominent examples may be in high-technology areas, such as biotechnology, where new or significantly improved products constantly are emerging. Innovation also is observed in more technologically mature markets, however, through the development of new methods of distribution, marketing, and management.  

Second, many have argued that of the three basic components of "economic efficiency" -- production efficiency, allocative efficiency, and innovation efficiency -- it is innovation efficiency that makes the greatest contribution to overall social


welfare. 27 Whatever relative weight one assigns to the various forms of efficiency, it is clear that innovation efficiency is extremely important. The importance of innovation to our global competitiveness underscores this point.

Given these circumstances, the antitrust agencies have a critical role to play in protecting innovation competition. Combinations of firms in some circumstances may be procompetitive; R&D joint ventures, for example, may lead to accelerated innovation and increased output. But at the same time, competition is a necessary and important spur to innovation. It is crucial that the antitrust agencies strike the right balance in assessing the likely effects of proposed transactions on innovation competition, as well as other forms of competition.

This is not an easy task. The contours of competition over innovation are typically more difficult to assess than price competition. As a simplified example, I will discuss R&D, which has characteristics that complicate business decisionmaking and therefore complicate the antitrust analysis of likely business

decisionmaking as well. One such characteristic is that R&D usually is conducted in secrecy, making it difficult for others -- actual or potential competitors, or even potential customers -- to observe the relevant innovation efforts. In addition to this general problem of observation, there is a broader problem of predicting the future products likely to result from R&D activities. Antitrust analysis is complicated by uncertainty about whether any products will emerge from R&D efforts; if so, what products will emerge and what products will they compete with; which firms' R&D is most likely to succeed and how soon are they likely to succeed. The innovating firms themselves may only be able to assign probabilities of success for their R&D activities; indeed, the products that emerge and the applications to which they are put have often surprised the innovators themselves.

Nonetheless, we do have analytical tools available to examine innovation competition issues that may be raised by a merger. To illustrate, I will discuss how one might approach product market definition in the context of innovation competition. At least three types of "markets" may come into play where innovation is concerned -- the current product market, the market for R&D, and the market for future products that

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28 See D. Yao & S. DeSanti, supra note 25 for a fuller discussion of this issue, as well as competitive effects, entry, and efficiencies.
emerge from the R&D.\textsuperscript{29} I will address the latter two -- the R&D market and the future product market.

With respect to the R&D market, the Guidelines' approach to market definition is of limited value, because it focuses on buyers' likely responses to a price increase. For the R&D market, there is no current product for which there are buyers and sellers, and there is no market "price" for R&D. However, a framework more suitable for defining R&D markets is suggested in the Justice Department's discussion of a hypothetical R&D joint venture in their 1988 Antitrust Enforcement Guidelines for International Operations (Case 6).\textsuperscript{30} There, after acknowledging the difficulties of defining R&D markets and weighting the relative competitive significance of firms in the market, the Justice Department lays out an approach that seeks to identify "all firms that, judged objectively, appeared to have the incentive and ability, alone or cooperatively, to undertake R&D comparable to the R&D proposed to be undertaken by the joint venture," taking into account factors such as firms' business objectives, facilities, existing technologies, and technologies under development.\textsuperscript{31}


\textsuperscript{31} Id.
Another rich source of ideas that might be used to build on this approach is the business strategy literature. This literature, which to my knowledge has not been greatly exploited, has to do with competitive significance and gaining sustainable advantage over one's competitors. In particular, the recent work on the "core competencies" of firms may be of value in thinking about R&D and future product markets.

"Core competencies" have been defined as "the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies." As examples, consider "Honda's core competence in engines and power trains that gives it a distinct advantage in car, motorcycle, lawn mower, and generator businesses," and "Canon's core competencies in optics, imaging, and microprocessor controls[, which] have enabled it to enter, even dominate, markets as seemingly diverse as copiers, laser printers, cameras, and image scanners." The essential notion is that companies are likely to be more successful if they build and sustain a handful of core competencies, with an emphasis on


34 Id. at 82.
interrelatedness both across products and across business functions (e.g., R&D, marketing, manufacturing, etc.).

I will speculate about three ways in which this perspective might aid antitrust analysis. First, this perspective may provide insight into the relative competitive significance of market participants, both in terms of the R&D market and possible future product markets. For instance, the amount of R&D alone may not be a good indicator of competitive significance; one company that is a leader in semiconductors and a major player in telecommunications products and computers, reportedly has spent less on R&D as a percentage of sales than most of its competitors. Second, the perspective may suggest some of the right questions to ask about the extent of competitive overlap among firms -- for example, the extent to which proposed merger partners have "core competencies" that overlap. Finally, as a more general benefit, the perspective may surface issues, relationships, and questions that will lead to a fuller understanding of the nature of innovation competition.

The purpose of this digression into the world of business strategy is to suggest the potential -- and I stress the word "potential" -- for mining this literature for insights relevant to antitrust analysis. Although these concepts, which are relatively new in the strategy literature, have not yet been developed as a practical antitrust tool, I think that even in its
current stage of development the "core competency" perspective will suggest additional important issues and questions for the analysis of mergers in innovation-driven markets.

With respect to definition of the future product market, an approach more closely tied to the Guidelines may be possible, if adequate information is available about the likely future product and there have been ongoing customer relationships. Such an approach would attempt to define the future product market based on past decisions and current perceptions of buyers and sellers in existing markets that are related to the likely future product market. The analysis reflected in Judge Bork's decision in FTC v. PPG Industries, Inc.\textsuperscript{35} illustrates such an approach. There, a key question was whether the merging firms competed in innovation for new generations of products. One of the product markets alleged by the Commission was a market for aircraft transparencies requiring "high technology" to produce. The court of appeals affirmed the district court's finding that such a "high technology" market existed, and that the two merging firms competed in that market. This conclusion was based largely on perceptions of those firms and of customers as to the nature of competition at the request-for-proposal stage of aircraft transparency development, which was the stage of R&D when transparency producers attempted to influence customers'
decisions about types of transparencies to be used in future generations of aircraft.36

In this discussion, I have attempted to highlight some of our successes with, as well as some of the challenges to, an appropriate assessment of a merger’s likely effects on innovation competition. If we are to keep pace with the change and innovation that is evident in many markets today, the antitrust agencies’ analysis of mergers will need to be equally flexible and innovative. The 1992 Horizontal Merger Guidelines provide the necessary analytical foundation for this task and represent a broad consensus in the legal and economic analysis of mergers. In addition, the Commission’s recent experience in merger enforcement suggests that the Guidelines work well and are sufficiently flexible to evolve to address new concerns as they arise.

36 798 F. 2d at 1505.