# ANTITRUST LAW

# **Unit 9: Introduction to Mergers**

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**Statutes** 

#### STATUTORY SUBSTANTIVE STANDARDS

#### Clayton Act § 7, ¶ 1 Ch. 323, § 7, 38 Stat. 731 (1914)

That no corporation engaged in commerce shall acquire, acquire, directly or indirectly, the whole or any part of the stock or other share capital of another corporation engaged also in commerce, where the effect of such acquisition may be to substantially lessen competition between the corporation whose stock is so acquired and the corporation making the acquisition, or to restrain such commerce in any section or community, or tend to create a monopoly of any line of commerce.

#### Clayton Act § 7, ¶ 1 (current version—marked for changes against 1914 version)

That no corporationNo person engaged in commerce shall acquire, or in any activity affecting commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital of another corporationand no person subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of another person engaged also in commerce, where or in any activity affecting commerce, where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be to substantially to lessen competition between the corporation whose stock is so acquired and the corporation making the acquisition, or to restrain such commerce in any section or community, or, or to tend to create a monopoly of any line of commerce.

#### Clayton Act § 7 (complete current version)

No person engaged in commerce or in any activity affecting commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital and no person subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of another person engaged also in commerce or in any activity affecting commerce, where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.

No person shall acquire, directly or indirectly, the whole or any part of the stock or other share capital and no person subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of one or more persons engaged in commerce or in any activity affecting commerce, where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition, of such stocks or assets, or of the use of such stock by the voting or granting of proxies or otherwise, may be substantially to lessen competition, or to tend to create a monopoly.

This section shall not apply to persons purchasing such stock solely for investment and not using the same by voting or otherwise to bring about, or in attempting to bring about, the substantial lessening of competition. Nor shall anything contained in this section prevent a corporation engaged in commerce or in any activity affecting commerce from causing the formation of subsidiary corporations for the actual carrying on of their immediate lawful business, or the natural and legitimate branches or extensions thereof, or from owning and holding all or a part of the stock of such subsidiary corporations, when the effect of such formation is not to substantially lessen competition.

Nor shall anything herein contained be construed to prohibit any common carrier subject to the laws to regulate commerce from aiding in the construction of branches or short lines so located as to become feeders to the main line of the company so aiding in such construction or from acquiring or owning all or any part of the stock of such branch lines, nor to prevent any such common carrier from acquiring and owning all or any part of the stock of a branch or short line constructed by an independent company where there is no substantial competition between the company owning the branch line so constructed and the company owning the main line acquiring the property or an interest therein, nor to prevent such common carrier from extending any of its lines through the medium of the acquisition of stock or otherwise of any other common carrier where there is no substantial competition between the company extending its lines and the company whose stock, property, or an interest therein is so acquired.

Nothing contained in this section shall be held to affect or impair any right heretofore legally acquired: Provided, That nothing in this section shall be held or construed to authorize or make lawful anything heretofore prohibited or made illegal by the antitrust laws, nor to exempt any person from the penal provisions thereof or the civil remedies therein provided.

Nothing contained in this section shall apply to transactions duly consummated pursuant to authority given by the Secretary of Transportation, Federal Power Commission, Surface Transportation Board, the Securities and Exchange Commission in the exercise of its jurisdiction under section 79j of this title, the United States Maritime Commission, or the Secretary of Agriculture under any statutory provision vesting such power in such Commission, Board, or Secretary. [18 U.S.C. § 18]

Legislative History

#### BROWN SHOE CO. v. UNITED STATES 370 U.S. 294 (1962) (EXCERPT ON THE CELLER-KEFAUVER ACT OF 1950)\*

MR. CHIEF JUSTICE WARREN delivered the opinion of the Court.

I.

This suit was initiated in November 1955 when the Government filed a civil action in the United States District Court for the Eastern District of Missouri alleging that a contemplated merger between the G. R. Kinney Company, Inc. (Kinney), and the Brown Shoe Company, Inc. (Brown), through an exchange of Kinney for Brown stock, would violate § 7 of the Clayton Act, 15 U. S. C. § 18. The Act, as amended, provides in pertinent part:

"No corporation engaged in commerce shall acquire, directly or indirectly, the wb.ole or any part of the stock or other share capital  $\ldots$  of another corporation engaged also in commerce, where in any line of commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly."

The complaint sought injunctive relief under § 15 of the Clayton Act, 15 U.S.C. § 25, to restrain consummation of the merger.

A motion by the Government for a preliminary injunction *pendente lite* was denied, and the companies were permitted to merge provided, however, that their ·businesses be operated separately and that their assets be kept separately identifiable. The merger was then effected on May 1, 1956.

In the District Court, the Government contended that the effect of the merger of Brown—the third largest seller of shoes by dollar volume in the United States, a leading manufacturer of men's, women's, and children's shoes, and a retailer with over 1,230 owned, operated or controlled retail outlets—and Kinney—the eighth largest company, by dollar volume, among those primarily engaged in selling shoes, itself a large manufacturer of shoes, and a retailer with over 350 retail outlets—"may be substantially to lessen competition or to tend to create a monopoly" by eliminating actual or potential competition in the production of shoes for the national wholesale shoe market and in the sale of shoes at retail in the Nation, by foreclosing competition from "a market represented by Kinney's retail outlets whose annual sales exceed \$42,000,000," and by enhancing Brown's competitive advantage over other producers, distributors and sellers of shoes. The Government argued that the "line of commerce" affected by this merger is "footwear," or alternatively, that the "line[s]" are "men's," "women's," and "children's" shoes, separately considered, and that the "section of the country," within which the anticompetitive effect of the

Most footnotes and internal citations have been omitted without indication.

merger is to be judged, is the Nation as a whole, or alternatively, each separate city or city and its immediate surrounding area in which the parties sell shoes at retail.

In the District Court, Brown contended that the merger would be shown not to endanger competition if the "line[s] of commerce" and the "section[s] of the country" were properly determined. Brown urged that not only were the age and sex of the intended customers to be considered in determining the relevant line of commerce, but that differences in grade of material, quality of workmanship, price, and customer use of shoes resulted in establishing different lines of commerce. While agreeing with the Government that, with regard to manufacturing, the relevant geographic market for assessing the effect of the merger upon competition is the country as a whole, Brown contended that with regard to retailing, the market must vary with economic reality from the central business district of a large city to a "standard metropolitan area" for a smaller community. Brown further contended that, both at the manufacturing level and at the retail level, the shoe industry enjoyed healthy competition and that the vigor of this competition would not, in any event, be diminished by the proposed merger because Kinney manufactured less than 0.5% and retailed less than 2% of the Nation's shoes.

[The district court rendered judgment for the government and ordered Brown shoe to divest all of the stock, assets, and interests in held in Kinney. Brown Shoe took a direct appeal under the Expediting Act.]

#### ... Ш.

#### LEGISLATIVE HISTORY.

This case is one of the first to come before us in which the Government's complaint is based upon allegations that the appellant has violated § 7 of the Clayton Act, as that section was amended in 1950. The amendments adopted in 1950 culminated extensive efforts over a number of years, on the parts of both the Federal Trade Commission and some members of Congress, to secure revision of a section of the antitrust laws considered by many observers to be ineffective in its then existing form. Sixteen bills to amend § 7 during the period 1943 to 1949 alone were introduced for consideration by the Congress, and full public hearings on proposed amendments were held in three separate sessions. In the light of this extensive legislative attention to the measure, and the broad, general language finally selected by Congress for the expression of its will, we think it appropriate to review the history of the amended Act in determining whether the judgment of the court below was consistent with the intent of the legislature.

As enacted in 1914, § 7 of the original Clayton Act prohibited the acquisition by one corporation of the stock of another corporation when such acquisition would result in a substantial lessening of competition between the acquiring and the acquired companies, or tend to create a monopoly in any line of commerce. The Act did not, by its explicit terms, or as construed by this Court, bar the acquisition by one corporation of the assets of another. Nor did it appear to preclude the acquisition of stock in any corporation other than a direct competitor. Although proponents of the

1950 amendments to the Act suggested that the terminology employed in these provisions was the result of accident or an unawareness that the acquisition of assets could be as inimical to competition as stock acquisition, a review of the legislative history of the original Clayton Act fails to support such views. The possibility of asset acquisition was discussed but was not considered important to an Act then conceived to be directed primarily at the development of holding companies and at the secret acquisition of competitors through the purchase of all or parts of such competitors' stock.

It was, however, not long before the Federal Trade Commission recognized deficiencies in the Act as first enacted. Its Annual Reports frequently suggested amendments, principally along two lines: first, to "plug the loophole" exempting asset acquisitions from coverage under the Act, and second, to require companies proposing a merger to give the Commission prior notification of their plans. The Final Report of the Temporary National Economic Committee also recommended changes focusing on these two proposals. Hearings were held on some bills incorporating either or both of these changes but, prior to the amendments adopted in 1950, none reached the floor of Congress for plenary consideration. Although the bill that was eventually to become amended § 7 was confined to embracing within the Act's terms the acquisition of assets as well as stock, in the course of the hearings conducted in both the Eightieth and Eighty-first Congresses, a more far-reaching examination of the purposes and provisions of § 7 was undertaken. A review of the legislative history of these amendments provides no unmistakably clear indication of the precise standards the Congress wished the Federal Trade Commission and the courts to apply in judging the legality of particular mergers. However, sufficient expressions of a consistent point of view may be found in the hearings, committee reports of both the House and Senate and in floor debate to provide those charged with enforcing the Act with a usable frame of reference within which to evaluate any given merger.

The dominant theme pervading congressional consideration of the 1950 amendments was a fear of what was considered to be a rising tide of economic concentration in the American economy. Apprehension in this regard was bolstered by the publication in 1948 of the Federal Trade Commission's study on corporate mergers. Statistics from this and other current studies were cited as evidence of the danger to the American economy in unchecked corporate expansions through mergers. Other considerations cited in support of the bill were the desirability of retaining "local control" over industry and the protection of small businesses. Throughout the recorded discussion may be found examples of Congress' fear not only of accelerated concentration of economic power on economic grounds, but also of the threat to other values a trend toward concentration was thought to pose.

What were some of the factors, relevant to a judgment as to the validity of a given merger, specifically discussed by Congress in redrafting § 7?

First, there is no doubt that Congress did wish to "plug the loophole" and to inch1de within the coverage of the Act the acquisition of assets no less than the acquisition of stock.

Second, by the deletion of the "acquiring-acquired" language in the original text, it hoped to make plain that § 7 applied not only to mergers between actual competitors, but also to vertical and conglomerate mergers whose effect may tend to lessen competition in any line of commerce in any section of the country.

Third, it is apparent that a keystone in the erection of a barrier to what Congress saw was the rising tide of economic concentration, was its provision of authority for arresting mergers at a time when the trend to a lessening of competition in a line of commerce was still in its incipiency. Congress saw the process of concentration in American business as a dynamic force; it sought to assure the Federal Trade Commission and the courts the power to brake this force at its outset and before it gathered momentum.

Fourth, and closely related to the third, Congress rejected, as inappropriate to the problem it sought to remedy, the application to § 7 cases of the standards for judging the legality of business combinations adopted by the courts in dealing with cases arising under the Sherman Act, and which may have been applied to some early cases arising under original § 7.

Fifth, at the same time that it sought to create an effective tool for preventing all mergers having demonstrable anticompetitive effects, Congress recognized the stimulation to competition that might flow from particular mergers. When concern as to the Act's breadth was expressed, supporters of the amendments indicated that it would not impede, for example,. a merger between two small companies to enable the combination to compete more effectively with larger corporations dominating the relevant market, nor a merger between a corporation which is financially healthy and a failing one which no longer can be a vital competitive factor in the market. The deletion of the word "community" in the original Act's description of the relevant geographic market is another illustration of Congress' desire to indicate that its concern was with the adverse effects of a given merger on competition only in an economically significant "section" of the country. Taken as a whole, the legislative history illuminates congressional concern with the protection of competition, not competitors, and its desire to restrain mergers only to the extent that such combinations may tend to lessen competition.

Sixth, Congress neither adopted nor rejected specifically any particular tests for measuring the relevant markets, either as defined in terms of product or in terms of geographic locus of competition, within which the anticompetitive effects of a merger were to be judged. Nor did it adopt a definition of the word "substantially," whether in quantitative terms of sales or assets or market shares or in designated qualitative terms, by which a merger's effects on competition were to be measured.

Seventh, while providing no definite quantitative or qualitative tests by which enforcement agencies could gauge the effects of a given merger to determine whether it may "substantially" lessen competition or tend toward monopoly, Congress indicated plainly that a merger had to be functionally viewed, in the context of its particular industry. That is, whether the consolidation was to take place in an industry that was fragmented rather than concentrated, that had seen a recent trend toward domination by a few leaders or had remained fairly consistent in its distribution of market shares among the participating companies, that had experienced easy access to markets by suppliers and easy access to suppliers by buyers or had witnessed foreclosure of business, that had witnessed the ready entry of new competition or the erection of barriers to prospective entrants, all were aspects, varying in importance with the merger under consideration, which would properly be taken into account.

Eighth, Congress used the words "may be substantially to lessen competition" (emphasis supplied), to indicate that its concern was with probabilities, not certainties. Statutes existed for dealing with clear-cut menaces to competition; no statute was sought for dealing with ephemeral possibilities. Mergers with a probable anticompetitive effect were to be proscribed by this Act.

It is against this background that we return to the case before us.

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1992 DOJ/FTC Horizontal Merger Guidelines (superseded)

# Horizontal Merger Guidelines





U.S. Department of Justice and the Federal Trade Commission

Issued: April 2, 1992

Revised: April 8, 1997

Note: Section 4 of these Guidelines, relating to Efficiencies, appears as it was issued in revised form by the Department of Justice and the Federal Trade Commission on April 8, 1997; and the footnotes in Section 5 of the Guidelines have been renumbered accordingly. The remaining portions of the Guidelines were unchanged in 1997, and appear as they were issued on April 2, 1992.

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# 0. Purpose, Underlying Policy Assumptions and Overview

These Guidelines outline the present enforcement policy of the Department of Justice and the Federal Trade Commission (the "Agency") concerning horizontal acquisitions and mergers ("mergers") subject to section 7 of the Clayton Act,<sup>1</sup> to section 1 of the Sherman Act,<sup>2</sup> or to section 5 of the FTC Act.<sup>3</sup> They describe the analytical framework and specific standards normally used by the Agency in analyzing mergers.<sup>4</sup> By stating its policy as simply and clearly as possible, the Agency hopes to reduce the uncertainty associated with enforcement of the antitrust laws in this area.

Although the Guidelines should improve the predictability of the Agency's merger enforcement policy, it is not possible to remove the exercise of judgment from the evaluation of mergers under the antitrust laws. Because the specific standards set forth in the Guidelines must be applied to a broad range of possible factual circumstances, mechanical application of those standards may provide misleading answers to the economic questions raised under the antitrust laws. Moreover, information is often incomplete and the picture of competitive conditions that develops from historical evidence may provide an incomplete answer to the forward-looking inquiry of the Guidelines. Therefore, the Agency will apply the standards of the Guidelines reasonably and flexibly to the particular facts and circumstances of each proposed merger.

# 0.1 Purpose and Underlying Policy Assumptions of the Guidelines

The Guidelines are designed primarily to articulate the analytical framework the Agency applies in determining whether a merger is likely substan-

<sup>&</sup>lt;sup>1</sup> 15 U.S.C. § 18 (1988). Mergers subject to section 7 are prohibited if their effect "may be substantially to lessen competition, or to tend to create a monopoly."

 $<sup>^2</sup>$  15 U.S.C. § 1 (1988). Mergers subject to section 1 are prohibited if they constitute a "contract, combination . . ., or conspiracy in restraint of trade."

 $<sup>3\ 15\</sup> U.S.C.\ \S\ 45\ (1988).$  Mergers subject to section 5 are prohibited if they constitute an "unfair method of competition."

<sup>&</sup>lt;sup>4</sup> These Guidelines update the Merger Guidelines issued by the U.S. Department of Justice in 1984 and the Statement of Federal Trade Commission Concerning Horizontal Mergers issued in 1982. The Merger Guidelines may be revised from time to time as necessary to reflect any significant changes in enforcement policy or to clarify aspects of existing policy.

tially to lessen competition, not to describe how the Agency will conduct the litigation of cases that it decides to bring. Although relevant in the latter context, the factors contemplated in the Guidelines neither dictate nor exhaust the range of evidence that the Agency must or may introduce in litigation. Consistent with their objective, the Guidelines do not attempt to assign the burden of proof, or the burden of coming forward with evidence, on any particular issue. Nor do the Guidelines attempt to adjust or reapportion burdens of proof or burdens of coming forward as those standards have been established by the courts.<sup>5</sup> Instead, the Guidelines set forth a methodology for analyzing issues once the necessary facts are available. The necessary facts may be derived from the documents and statements of both the merging firms and other sources.

Throughout the Guidelines, the analysis is focused on whether consumers or producers "likely would" take certain actions, that is, whether the action is in the actor's economic interest. References to the profitability of certain actions focus on economic profits rather than accounting profits. Economic profits may be defined as the excess of revenues over costs where costs include the opportunity cost of invested capital.

Mergers are motivated by the prospect of financial gains. The possible sources of the financial gains from mergers are many, and the Guidelines do not attempt to identify all possible sources of gain in every merger. Instead, the Guidelines focus on the one potential source of gain that is of concern under the antitrust laws: market power.

The unifying theme of the Guidelines is that mergers should not be permitted to create or enhance market power or to facilitate its exercise. Market power to a seller is the ability profitably to maintain prices above competitive levels for a significant period of time.<sup>6</sup> In some circumstances, a sole seller (a "monopolist") of a product with no good substitutes can maintain a selling price that is above the level that would prevail if the market were competitive. Similarly, in some circumstances, where only a few firms account for most of the sales of a product, those firms can exercise market power, perhaps even approximating the performance of a monopolist, by either explicitly or implicitly coordinating their actions. Circumstances also may permit a single firm, not a monopolist, to exercise market

 $<sup>^5</sup>$  For example, the burden with respect to efficiency and failure continues to reside with the proponents of the merger.

<sup>&</sup>lt;sup>6</sup> Sellers with market power also may lessen competition on dimensions other than price, such as product quality, service, or innovation.

power through unilateral or non-coordinated conduct -- conduct the success of which does not rely on the concurrence of other firms in the market or on coordinated responses by those firms. In any case, the result of the exercise of market power is a transfer of wealth from buyers to sellers or a misallocation of resources.

Market power also encompasses the ability of a single buyer (a "monopsonist"), a coordinating group of buyers, or a single buyer, not a monopsonist, to depress the price paid for a product to a level that is below the competitive price and thereby depress output. The exercise of market power by buyers ("monopsony power") has adverse effects comparable to those associated with the exercise of market power by sellers. In order to assess potential monopsony concerns, the Agency will apply an analytical framework analogous to the framework of these Guidelines.

While challenging competitively harmful mergers, the Agency seeks to avoid unnecessary interference with the larger universe of mergers that are either competitively beneficial or neutral. In implementing this objective, however, the Guidelines reflect the congressional intent that merger enforcement should interdict competitive problems in their incipiency.

### 0.2 Overview

The Guidelines describe the analytical process that the Agency will employ in determining whether to challenge a horizontal merger. First, the Agency assesses whether the merger would significantly increase concentration and result in a concentrated market, properly defined and measured. Second, the Agency assesses whether the merger, in light of market concentration and other factors that characterize the market, raises concern about potential adverse competitive effects. Third, the Agency assesses whether entry would be timely, likely and sufficient either to deter or to counteract the competitive effects of concern. Fourth, the Agency assesses any efficiency gains that reasonably cannot be achieved by the parties through other means. Finally the Agency assesses whether, but for the merger, either party to the transaction would be likely to fail, causing its assets to exit the market. The process of assessing market concentration, potential adverse competitive effects, entry, efficiency and failure is a tool that allows the Agency to answer the ultimate inquiry in merger analysis: whether the merger is likely to create or enhance market power or to facilitate its exercise.

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# 1. Market Definition, Measurement and Concentration

# 1.0 Overview

A merger is unlikely to create or enhance market power or to facilitate its exercise unless it significantly increases concentration and results in a concentrated market, properly defined and measured. Mergers that either do not significantly increase concentration or do not result in a concentrated market ordinarily require no further analysis.

The analytic process described in this section ensures that the Agency evaluates the likely competitive impact of a merger within the context of economically meaningful markets -- i.e., markets that could be subject to the exercise of market power. Accordingly, for each product or service (hereafter "product") of each merging firm, the Agency seeks to define a market in which firms could effectively exercise market power if they were able to coordinate their actions.

Market definition focuses solely on demand substitution factors -- i.e., possible consumer responses. Supply substitution factors -- i.e., possible production responses -- are considered elsewhere in the Guidelines in the identification of firms that participate in the relevant market and the analysis of entry. See Sections 1.3 and 3. A market is defined as a product or group of products and a geographic area in which it is produced or sold such that a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future producer or seller of those products in that area likely would impose at least a "small but significant and nontransitory" increase in price, assuming the terms of sale of all other products are held constant. A relevant market is a group of products and a geographic area that is no bigger than necessary to satisfy this test. The "small but significant and nontransitory" increase in price is employed solely as a methodological tool for the analysis of mergers: it is not a tolerance level for price increases.

Absent price discrimination, a relevant market is described by a product or group of products and a geographic area. In determining whether a hypothetical monopolist would be in a position to exercise market power, it is necessary to evaluate the likely demand responses of consumers to a price increase. A price increase could be made unprofitable by consumers either switching to other products or switching to the same product produced by firms at other locations. The nature and magnitude of these two

types of demand responses respectively determine the scope of the product market and the geographic market.

In contrast, where a hypothetical monopolist likely would discriminate in prices charged to different groups of buyers, distinguished, for example, by their uses or locations, the Agency may delineate different relevant markets corresponding to each such buyer group. Competition for sales to each such group may be affected differently by a particular merger and markets are delineated by evaluating the demand response of each such buyer group. A relevant market of this kind is described by a collection of products for sale to a given group of buyers.

Once defined, a relevant market must be measured in terms of its participants and concentration. Participants include firms currently producing or selling the market's products in the market's geographic area. In addition, participants may include other firms depending on their likely supply responses to a "small but significant and nontransitory" price increase. A firm is viewed as a participant if, in response to a "small but significant and nontransitory" price increase, it likely would enter rapidly into production or sale of a market product in the market's area, without incurring significant sunk costs of entry and exit. Firms likely to make any of these supply responses are considered to be "uncommitted" entrants because their supply response would create new production or sale in the relevant market and because that production or sale could be quickly terminated without significant loss.<sup>7</sup> Uncommitted entrants are capable of making such quick and uncommitted supply responses that they likely influenced the market premerger, would influence it post-merger, and accordingly are considered as market participants at both times. This analysis of market definition and market measurement applies equally to foreign and domestic firms.

If the process of market definition and market measurement identifies one or more relevant markets in which the merging firms are both participants, then the merger is considered to be horizontal. Sections 1.1 through 1.5 describe in greater detail how product and geographic markets will be defined, how market shares will be calculated and how market concentration will be assessed.

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<sup>7</sup> Probable supply responses that require the entrant to incur significant sunk costs of entry and exit are not part of market measurement, but are included in the analysis of the significance of entry. See Section 3. Entrants that must commit substantial sunk costs are regarded as "committed" entrants because those sunk costs make entry irreversible in the short term without foregoing that investment; thus the likelihood of their entry must be evaluated with regard to their long-term profitability.

## 1.1 Product Market Definition

The Agency will first define the relevant product market with respect to each of the products of each of the merging firms.  $^{\rm 8}$ 

### 1.11 General Standards

Absent price discrimination, the Agency will delineate the product market to be a product or group of products such that a hypothetical profitmaximizing firm that was the only present and future seller of those products ("monopolist") likely would impose at least a "small but significant and nontransitory" increase in price. That is, assuming that buyers likely would respond to an increase in price for a tentatively identified product group only by shifting to other products, what would happen? If the alternatives were, in the aggregate, sufficiently attractive at their existing terms of sale, an attempt to raise prices would result in a reduction of sales large enough that the price increase would not prove profitable, and the tentatively identified product group would prove to be too narrow.

Specifically, the Agency will begin with each product (narrowly defined) produced or sold by each merging firm and ask what would happen if a hypothetical monopolist of that product imposed at least a "small but significant and nontransitory" increase in price, but the terms of sale of all other products remained constant. If, in response to the price increase, the reduction in sales of the product would be large enough that a hypothetical monopolist would not find it profitable to impose such an increase in price, then the Agency will add to the product group the product that is the next-best substitute for the merging firm's product.<sup>9</sup>

In considering the likely reaction of buyers to a price increase, the Agency will take into account all relevant evidence, including, but not limited to, the following:

(1) evidence that buyers have shifted or have considered shifting purchases between products in response to relative changes in price or other competitive variables;

 $<sup>^8</sup>$  Although discussed separately, product market definition and geographic market definition are interrelated. In particular, the extent to which buyers of a particular product would shift to other products in the event of a "small but significant and nontransitory" increase in price must be evaluated in the context of the relevant geographic market.

<sup>&</sup>lt;sup>9</sup> Throughout the Guidelines, the term "next best substitute" refers to the alternative which, if available in unlimited quantities at constant prices, would account for the greatest value of diversion of demand in response to a "small but significant and nontransitory" price increase.

(2) evidence that sellers base business decisions on the prospect of buyer substitution between products in response to relative changes in price or other competitive variables;

(3) the influence of downstream competition faced by buyers in their output markets; and

(4) the timing and costs of switching products.

The price increase question is then asked for a hypothetical monopolist controlling the expanded product group. In performing successive iterations of the price increase test, the hypothetical monopolist will be assumed to pursue maximum profits in deciding whether to raise the prices of any or all of the additional products under its control. This process will continue until a group of products is identified such that a hypothetical monopolist over that group of products would profitably impose at least a "small but significant and nontransitory" increase, including the price of a product of one of the merging firms. The Agency generally will consider the relevant product market to be the smallest group of products that satisfies this test.

In the above analysis, the Agency will use prevailing prices of the products of the merging firms and possible substitutes for such products, unless premerger circumstances are strongly suggestive of coordinated interaction, in which case the Agency will use a price more reflective of the competitive price.<sup>10</sup> However, the Agency may use likely future prices, absent the merger, when changes in the prevailing prices can be predicted with reasonable reliability. Changes in price may be predicted on the basis of, for example, changes in regulation which affect price either directly or indirectly by affecting costs or demand.

In general, the price for which an increase will be postulated will be whatever is considered to be the price of the product at the stage of the industry being examined.<sup>11</sup> In attempting to determine objectively the effect of a "small but significant and nontransitory" increase in price, the Agency, in most contexts, will use a price increase of five percent lasting for the foreseeable future. However, what constitutes a "small but significant and nontransitory" increase in price will depend on the nature of the

<sup>10~</sup> The terms of sale of all other products are held constant in order to focus market definition on the behavior of consumers. Movements in the terms of sale for other products, as may result from the behavior of producers of those products, are accounted for in the analysis of competitive effects and entry. See Sections 2 and 3.

<sup>&</sup>lt;sup>11</sup> For example, in a merger between retailers, the relevant price would be the retail price of a product to consumers. In the case of a merger among oil pipelines, the relevant price would be the tariff – the price of the transportation service.

industry, and the Agency at times may use a price increase that is larger or smaller than five percent.

# 1.12 Product Market Definition in the Presence of Price Discrimination

The analysis of product market definition to this point has assumed that price discrimination -- charging different buyers different prices for the same product, for example -- would not be profitable for a hypothetical monopolist. A different analysis applies where price discrimination would be profitable for a hypothetical monopolist.

Existing buyers sometimes will differ significantly in their likelihood of switching to other products in response to a "small but significant and non-transitory" price increase. If a hypothetical monopolist can identify and price differently to those buyers ("targeted buyers") who would not defeat the targeted price increase by substituting to other products in response to a "small but significant and nontransitory" price increase for the relevant product, and if other buyers likely would not purchase the relevant product and resell to targeted buyers, then a hypothetical monopolist would profitably impose a discriminatory price increase on sales to targeted buyers. This is true regardless of whether a general increase in price would cause such significant substitution that the price increase would not be profitable. The Agency will consider additional relevant product markets consisting of a particular use or uses by groups of buyers of the product for which a hypothetical monopolist would profitably and separately impose at least a "small but significant and nontransitory" increase in price.

# 1.2 Geographic Market Definition

For each product market in which both merging firms participate, the Agency will determine the geographic market or markets in which the firms produce or sell. A single firm may operate in a number of different geographic markets.

### 1.21 General Standards

Absent price discrimination, the Agency will delineate the geographic market to be a region such that a hypothetical monopolist that was the only present or future producer of the relevant product at locations in that

region would profitably impose at least a "small but significant and nontransitory" increase in price, holding constant the terms of sale for all products produced elsewhere. That is, assuming that buyers likely would respond to a price increase on products produced within the tentatively identified region only by shifting to products produced at locations of production outside the region, what would happen? If those locations of production outside the region were, in the aggregate, sufficiently attractive at their existing terms of sale, an attempt to raise price would result in a reduction in sales large enough that the price increase would not prove profitable, and the tentatively identified geographic area would prove to be too narrow.

In defining the geographic market or markets affected by a merger, the Agency will begin with the location of each merging firm (or each plant of a multiplant firm) and ask what would happen if a hypothetical monopolist of the relevant product at that point imposed at least a "small but significant and nontransitory" increase in price, but the terms of sale at all other locations remained constant. If, in response to the price increase, the reduction in sales of the product at that location would be large enough that a hypothetical monopolist producing or selling the relevant product at the merging firm's location would not find it profitable to impose such an increase in price, then the Agency will add the location from which production is the next-best substitute for production at the merging firm's location.

In considering the likely reaction of buyers to a price increase, the Agency will take into account all relevant evidence, including, but not limited to, the following:

(1) evidence that buyers have shifted or have considered shifting purchases between different geographic locations in response to relative changes in price or other competitive variables;

(2) evidence that sellers base business decisions on the prospect of buyer substitution between geographic locations in response to relative changes in price or other competitive variables;

(3) the influence of downstream competition faced by buyers in their output markets; and

(4) the timing and costs of switching suppliers.

The price increase question is then asked for a hypothetical monopolist controlling the expanded group of locations. In performing successive iterations of the price increase test, the hypothetical monopolist will be assumed to pursue maximum profits in deciding whether to raise the price at any or all of the additional locations under its control. This process will continue until a group of locations is identified such that a hypothetical monopolist over that group of locations would profitably impose at least a "small but significant and nontransitory" increase, including the price charged at a location of one of the merging firms.

The "smallest market" principle will be applied as it is in product market definition. The price for which an increase will be postulated, what constitutes a "small but significant and nontransitory" increase in price, and the substitution decisions of consumers all will be determined in the same way in which they are determined in product market definition.

#### 1.22 Geographic Market Definition in the Presence of Price Discrimination

The analysis of geographic market definition to this point has assumed that geographic price discrimination -- charging different prices net of transportation costs for the same product to buyers in different areas, for example -- would not be profitable for a hypothetical monopolist. However, if a hypothetical monopolist can identify and price differently to buyers in certain areas ("targeted buyers") who would not defeat the targeted price increase by substituting to more distant sellers in response to a "small but significant and nontransitory" price increase for the relevant product, and if other buyers likely would not purchase the relevant product and resell to targeted buyers,<sup>12</sup> then a hypothetical monopolist would profitably impose a discriminatory price increase. This is true even where a general price increase would cause such significant substitution that the price increase would not be profitable. The Agency will consider additional geographic markets consisting of particular locations of buyers for which a hypothetical monopolist would profitably and separately impose at least a "small but significant and nontransitory" increase in price.

 $<sup>12\,</sup>$  This arbitrage is inherently impossible for many services and is particularly difficult where the product is sold on a delivered basis and where transportation costs are a significant percentage of the final cost.

### 1.3 Identification of Firms That Participate in the Relevant Market

#### 1.31 Current Producers or Sellers

The Agency's identification of firms that participate in the relevant market begins with all firms that currently produce or sell in the relevant market. This includes vertically integrated firms to the extent that such inclusion accurately reflects their competitive significance in the relevant market prior to the merger. To the extent that the analysis under Section 1.1 indicates that used, reconditioned or recycled goods are included in the relevant market, market participants will include firms that produce or sell such goods and that likely would offer those goods in competition with other relevant products.

# 1.32 Firms That Participate Through Supply Response

In addition, the Agency will identify other firms not currently producing or selling the relevant product in the relevant area as participating in the relevant market if their inclusion would more accurately reflect probable supply responses. These firms are termed "uncommitted entrants." These supply responses must be likely to occur within one year and without the expenditure of significant sunk costs of entry and exit, in response to a "small but significant and nontransitory" price increase. If a firm has the technological capability to achieve such an uncommitted supply response, but likely would not (e.g., because difficulties in achieving product acceptance, distribution, or production would render such a response unprofitable), that firm will not be considered to be a market participant. The competitive significance of supply responses that require more time or that require firms to incur significant sunk costs of entry and exit will be considered in entry analysis. See Section 3.<sup>13</sup>

Sunk costs are the acquisition costs of tangible and intangible assets that cannot be recovered through the redeployment of these assets outside the relevant market, i.e., costs uniquely incurred to supply the relevant product and geographic market. Examples of sunk costs may include mar-

<sup>13</sup> If uncommitted entrants likely would also remain in the market and would meet the entry tests of timeliness, likelihood and sufficiency, and thus would likely deter anticompetitive mergers or deter or counteract the competitive effects of concern (see Section 3, *infra*), the Agency will consider the impact of those firms in the entry analysis.

ket-specific investments in production facilities, technologies, marketing (including product acceptance), research and development, regulatory approvals, and testing. A significant sunk cost is one which would not be recouped within one year of the commencement of the supply response, assuming a "small but significant and nontransitory" price increase in the relevant market. In this context, a "small but significant and nontransitory" price increase will be determined in the same way in which it is determined in product market definition, except the price increase will be assumed to last one year. In some instances, it may be difficult to calculate sunk costs with precision. Accordingly, when necessary, the Agency will make an overall assessment of the extent of sunk costs for firms likely to participate through supply responses.

These supply responses may give rise to new production of products in the relevant product market or new sources of supply in the relevant geographic market. Alternatively, where price discrimination is likely so that the relevant market is defined in terms of a targeted group of buyers, these supply responses serve to identify new sellers to the targeted buyers. Uncommitted supply responses may occur in several different ways: by the switching or extension of existing assets to production or sale in the relevant market; or by the construction or acquisition of assets that enable production or sale in the relevant market.

#### 1.321 Production Substitution and Extension: The Switching or Extension of Existing Assets to Production or Sale in the Relevant Market

The productive and distributive assets of a firm sometimes can be used to produce and sell either the relevant products or products that buyers do not regard as good substitutes. Production substitution refers to the shift by a firm in the use of assets from producing and selling one product to producing and selling another. Production extension refers to the use of those assets, for example, existing brand names and reputation, both for their current production and for production of the relevant product. Depending upon the speed of that shift and the extent of sunk costs incurred in the shift or extension, the potential for production substitution or extension may necessitate treating as market participants firms that do not currently produce the relevant product.<sup>14</sup>

If a firm has existing assets that likely would be shifted or extended into production and sale of the relevant product within one year, and without incurring significant sunk costs of entry and exit, in response to a "small but significant and nontransitory" increase in price for only the relevant product, the Agency will treat that firm as a market participant. In assessing whether a firm is such a market participant, the Agency will take into account the costs of substitution or extension relative to the profitability of sales at the elevated price, and whether the firm's capacity is elsewhere committed or elsewhere so profitably employed that such capacity likely would not be available to respond to an increase in price in the market.

#### 1.322 Obtaining New Assets for Production or Sale of the Relevant Product

A firm may also be able to enter into production or sale in the relevant market within one year and without the expenditure of significant sunk costs of entry and exit, in response to a "small but significant and nontransitory" increase in price for only the relevant product, even if the firm is newly organized or is an existing firm without products or productive assets closely related to the relevant market. If new firms, or existing firms without closely related products or productive assets, likely would enter into production or sale in the relevant market within one year without the expenditure of significant sunk costs of entry and exit, the Agency will treat those firms as market participants.

# 1.4 Calculating Market Shares

### 1.41 General Approach

The Agency normally will calculate market shares for all firms (or plants) identified as market participants in Section 1.3 based on the total sales or capacity currently devoted to the relevant market together with that

<sup>14</sup> Under other analytical approaches, production substitution sometimes has been reflected in the description of the product market. For example, the product market for stamped metal products such as automobile hub caps might be described as "light metal stamping," a production process rather than a product. The Agency believes that the approach described in the text provides a more clearly focused method of incorporating this factor in merger analysis. If production substitution among a group of products is nearly universal among the firms selling one or more of those products, however, the Agency may use an aggregate description of those markets as a matter of convenience.

which likely would be devoted to the relevant market in response to a "small but significant and nontransitory" price increase. Market shares can be expressed either in dollar terms through measurement of sales, shipments, or production, or in physical terms through measurement of sales, shipments, production, capacity, or reserves.

Market shares will be calculated using the best indicator of firms' future competitive significance. Dollar sales or shipments generally will be used if firms are distinguished primarily by differentiation of their products. Unit sales generally will be used if firms are distinguished primarily on the basis of their relative advantages in serving different buyers or groups of buyers. Physical capacity or reserves generally will be used if it is these measures that most effectively distinguish firms.<sup>15</sup> Typically, annual data are used, but where individual sales are large and infrequent so that annual data may be unrepresentative, the Agency may measure market shares over a longer period of time.

In measuring a firm's market share, the Agency will not include its sales or capacity to the extent that the firm's capacity is committed or so profitably employed outside the relevant market that it would not be available to respond to an increase in price in the market.

#### 1.42 Price Discrimination Markets

When markets are defined on the basis of price discrimination (Sections 1.12 and 1.22), the Agency will include only sales likely to be made into, or capacity likely to be used to supply, the relevant market in response to a "small but significant and nontransitory" price increase.

### 1.43 Special Factors Affecting Foreign Firms

Market shares will be assigned to foreign competitors in the same way in which they are assigned to domestic competitors. However, if exchange rates fluctuate significantly, so that comparable dollar calculations on an annual basis may be unrepresentative, the Agency may measure market shares over a period longer than one year.

If shipments from a particular country to the United States are subject to a quota, the market shares assigned to firms in that country will not

 $<sup>^{15}</sup>$   $\,$  Where all firms have, on a forward-looking basis, an equal likelihood of securing sales, the Agency will assign firms equal shares.

exceed the amount of shipments by such firms allowed under the quota.<sup>16</sup> In the case of restraints that limit imports to some percentage of the total amount of the product sold in the United States (i.e., percentage quotas), a domestic price increase that reduced domestic consumption also would reduce the volume of imports into the United States. Accordingly, actual import sales and capacity data will be reduced for purposes of calculating market shares. Finally, a single market share may be assigned to a country or group of countries if firms in that country or group of countries act in coordination.

# 1.5 Concentration and Market Shares

Market concentration is a function of the number of firms in a market and their respective market shares. As an aid to the interpretation of market data, the Agency will use the Herfindahl-Hirschman Index ("HHI") of market concentration. The HHI is calculated by summing the squares of the individual market shares of all the participants.<sup>17</sup> Unlike the four-firm concentration ratio, the HHI reflects both the distribution of the market shares of the top four firms and the composition of the market outside the top four firms. It also gives proportionately greater weight to the market shares of the larger firms, in accord with their relative importance in competitive interactions.

The Agency divides the spectrum of market concentration as measured by the HHI into three regions that can be broadly characterized as unconcentrated (HHI below 1000), moderately concentrated (HHI between 1000 and 1800), and highly concentrated (HHI above 1800). Although the resulting regions provide a useful framework for merger analysis, the numerical divisions suggest greater precision than is possible with the available economic tools and information. Other things being equal, cases falling just above and just below a threshold present comparable competitive issues.

 $<sup>1^{6}</sup>$  The constraining effect of the quota on the importer's ability to expand sales is relevant to the evaluation of potential adverse competitive effects. See Section 2.

<sup>&</sup>lt;sup>17</sup> For example, a market consisting of four firms with market shares of 30 percent, 30 percent, 20 percent and 20 percent has an HHI of  $2600 (30^2 + 30^2 + 20^2 + 20^2 = 2600)$ . The HHI ranges from 10,000 (in the case of a pure monopoly) to a number approaching zero (in the case of an atomistic market). Although it is desirable to include all firms in the calculation, lack of information about small firms is not critical because such firms do not affect the HHI significantly.

### 1.51 General Standards

In evaluating horizontal mergers, the Agency will consider both the post-merger market concentration and the increase in concentration resulting from the merger.<sup>18</sup> Market concentration is a useful indicator of the likely potential competitive effect of a merger. The general standards for horizontal mergers are as follows:

a) <u>Post-Merger HHI Below 1000</u>. The Agency regards markets in this region to be unconcentrated. Mergers resulting in unconcentrated markets are unlikely to have adverse competitive effects and ordinarily require no further analysis.

b) <u>Post-Merger HHI Between 1000 and 1800</u>. The Agency regards markets in this region to be moderately concentrated. Mergers producing an increase in the HHI of less than 100 points in moderately concentrated markets post-merger are unlikely to have adverse competitive consequences and ordinarily require no further analysis. Mergers producing an increase in the HHI of more than 100 points in moderately concentrated markets post-merger potentially raise significant competitive concerns depending on the factors set forth in Sections 2-5 of the Guidelines.

c) <u>Post-Merger HHI Above 1800</u>. The Agency regards markets in this region to be highly concentrated. Mergers producing an increase in the HHI of less than 50 points, even in highly concentrated markets post-merger, are unlikely to have adverse competitive consequences and ordinarily require no further analysis. Mergers producing an increase in the HHI of more than 50 points in highly concentrated markets post-merger potentially raise significant competitive concerns, depending on the factors set forth in Sections 2-5 of the Guidelines. Where the post-merger HHI exceeds 1800, it will be presumed that mergers producing an increase in the HHI of more than 100 points are likely to create or enhance market power or facilitate its exercise. The presumption may be overcome by a showing that factors set forth in Sections 2-5 of the Guidelines make it

<sup>&</sup>lt;sup>18</sup> The increase in concentration as measured by the HHI can be calculated independently of the overall market concentration by doubling the product of the market shares of the merging firms. For example, the merger of firms with shares of 5 percent and 10 percent of the market would increase the HHI by 100 (5 x 10 x 2 = 100). The explanation for this technique is as follows: In calculating the HHI before the merger, the market shares of the merging firms are squared individually: (a)<sup>2</sup> + (b)<sup>2</sup>. After the merger, the sum of those shares would be squared: (a + b)<sup>2</sup>, which equals a<sup>2</sup> + 2ab + b<sup>2</sup>. The increase in the HHI therefore is represented by 2ab.

unlikely that the merger will create or enhance market power or facilitate its exercise, in light of market concentration and market shares.

#### **1.52** Factors Affecting the Significance of Market Shares and Concentration

The post-merger level of market concentration and the change in concentration resulting from a merger affect the degree to which a merger raises competitive concerns. However, in some situations, market share and market concentration data may either understate or overstate the likely future competitive significance of a firm or firms in the market or the impact of a merger. The following are examples of such situations.

#### 1.521 Changing Market Conditions

Market concentration and market share data of necessity are based on historical evidence. However, recent or ongoing changes in the market may indicate that the current market share of a particular firm either understates or overstates the firm's future competitive significance. For example, if a new technology that is important to long-term competitive viability is available to other firms in the market, but is not available to a particular firm, the Agency may conclude that the historical market share of that firm overstates its future competitive significance. The Agency will consider reasonably predictable effects of recent or ongoing changes in market conditions in interpreting market concentration and market share data.

#### 1.522 Degree of Difference Between the Products and Locations in the Market and Substitutes Outside the Market

All else equal, the magnitude of potential competitive harm from a merger is greater if a hypothetical monopolist would raise price within the relevant market by substantially more than a "small but significant and non-transitory" amount. This may occur when the demand substitutes outside the relevant market, as a group, are not close substitutes for the products and locations within the relevant market. There thus may be a wide gap in the chain of demand substitutes at the edge of the product and geographic market. Under such circumstances, more market power is at stake in the relevant market than in a market in which a hypothetical monopolist would raise price by exactly five percent.

# 2. The Potential Adverse Competitive Effects of Mergers

# 2.0 Overview

Other things being equal, market concentration affects the likelihood that one firm, or a small group of firms, could successfully exercise market power. The smaller the percentage of total supply that a firm controls, the more severely it must restrict its own output in order to produce a given price increase, and the less likely it is that an output restriction will be profitable. If collective action is necessary for the exercise of market power, as the number of firms necessary to control a given percentage of total supply decreases, the difficulties and costs of reaching and enforcing an understanding with respect to the control of that supply might be reduced. However, market share and concentration data provide only the starting point for analyzing the competitive impact of a merger. Before determining whether to challenge a merger, the Agency also will assess the other market factors that pertain to competitive effects, as well as entry, efficiencies and failure.

This section considers some of the potential adverse competitive effects of mergers and the factors in addition to market concentration relevant to each. Because an individual merger may threaten to harm competition through more than one of these effects, mergers will be analyzed in terms of as many potential adverse competitive effects as are appropriate. Entry, efficiencies, and failure are treated in Sections 3-5.

# 2.1 Lessening of Competition Through Coordinated Interaction

A merger may diminish competition by enabling the firms selling in the relevant market more likely, more successfully, or more completely to engage in coordinated interaction that harms consumers. Coordinated interaction is comprised of actions by a group of firms that are profitable for each of them only as a result of the accommodating reactions of the others. This behavior includes tacit or express collusion, and may or may not be lawful in and of itself.

Successful coordinated interaction entails reaching terms of coordination that are profitable to the firms involved and an ability to detect and punish deviations that would undermine the coordinated interaction. Detection and punishment of deviations ensure that coordinating firms will find it more profitable to adhere to the terms of coordination than to pursue short-term profits from deviating, given the costs of reprisal. In this phase of the analysis, the Agency will examine the extent to which postmerger market conditions are conducive to reaching terms of coordination, detecting deviations from those terms, and punishing such deviations. Depending upon the circumstances, the following market factors, among others, may be relevant: the availability of key information concerning market conditions, transactions and individual competitors; the extent of firm and product heterogeneity; pricing or marketing practices typically employed by firms in the market; the characteristics of buyers and sellers; and the characteristics of typical transactions.

Certain market conditions that are conducive to reaching terms of coordination also may be conducive to detecting or punishing deviations from those terms. For example, the extent of information available to firms in the market, or the extent of homogeneity, may be relevant to both the ability to reach terms of coordination and to detect or punish deviations from those terms. The extent to which any specific market condition will be relevant to one or more of the conditions necessary to coordinated interaction will depend on the circumstances of the particular case.

It is likely that market conditions are conducive to coordinated interaction when the firms in the market previously have engaged in express collusion and when the salient characteristics of the market have not changed appreciably since the most recent such incident. Previous express collusion in another geographic market will have the same weight when the salient characteristics of that other market at the time of the collusion are comparable to those in the relevant market.

In analyzing the effect of a particular merger on coordinated interaction, the Agency is mindful of the difficulties of predicting likely future behavior based on the types of incomplete and sometimes contradictory information typically generated in merger investigations. Whether a merger is likely to diminish competition by enabling firms more likely, more successfully or more completely to engage in coordinated interaction depends on whether market conditions, on the whole, are conducive to reaching terms of coordination and detecting and punishing deviations from those terms.

# 2.11 Conditions Conducive to Reaching Terms of Coordination

Firms coordinating their interactions need not reach complex terms concerning the allocation of the market output across firms or the level of the market prices but may, instead, follow simple terms such as a common price, fixed price differentials, stable market shares, or customer or territorial restrictions. Terms of coordination need not perfectly achieve the monopoly outcome in order to be harmful to consumers. Instead, the terms of coordination may be imperfect and incomplete -- inasmuch as they omit some market participants, omit some dimensions of competition, omit some customers, yield elevated prices short of monopoly levels, or lapse into episodic price wars -- and still result in significant competitive harm. At some point, however, imperfections cause the profitability of abiding by the terms of coordination to decrease and, depending on their extent, may make coordinated interaction unlikely in the first instance.

Market conditions may be conducive to or hinder reaching terms of coordination. For example, reaching terms of coordination may be facilitated by product or firm homogeneity and by existing practices among firms, practices not necessarily themselves antitrust violations, such as standardization of pricing or product variables on which firms could compete. Key information about rival firms and the market may also facilitate reaching terms of coordination. Conversely, reaching terms of coordination may be limited or impeded by product heterogeneity or by firms having substantially incomplete information about the conditions and prospects of their rivals' businesses, perhaps because of important differences among their current business operations. In addition, reaching terms of coordination may be limited or impeded by firm heterogeneity, for example, differences in vertical integration or the production of another product that tends to be used together with the relevant product.

#### 2.12 Conditions Conducive to Detecting and Punishing Deviations

Where market conditions are conducive to timely detection and punishment of significant deviations, a firm will find it more profitable to abide by the terms of coordination than to deviate from them. Deviation from the terms of coordination will be deterred where the threat of punishment is credible. Credible punishment, however, may not need to be any more complex than temporary abandonment of the terms of coordination by other firms in the market.

Where detection and punishment likely would be rapid, incentives to deviate are diminished and coordination is likely to be successful. The detection and punishment of deviations may be facilitated by existing practices among firms, themselves not necessarily antitrust violations, and by the characteristics of typical transactions. For example, if key information about specific transactions or individual price or output levels is available routinely to competitors, it may be difficult for a firm to deviate secretly. If orders for the relevant product are frequent, regular and small relative to the total output of a firm in a market, it may be difficult for the firm to deviate in a substantial way without the knowledge of rivals and without the opportunity for rivals to react. If demand or cost fluctuations are relatively infrequent and small, deviations may be relatively easy to deter.

By contrast, where detection or punishment is likely to be slow, incentives to deviate are enhanced and coordinated interaction is unlikely to be successful. If demand or cost fluctuations are relatively frequent and large, deviations may be relatively difficult to distinguish from these other sources of market price fluctuations, and, in consequence, deviations may be relatively difficult to deter.

In certain circumstances, buyer characteristics and the nature of the procurement process may affect the incentives to deviate from terms of coordination. Buyer size alone is not the determining characteristic. Where large buyers likely would engage in long-term contracting, so that the sales covered by such contracts can be large relative to the total output of a firm in the market, firms may have the incentive to deviate. However, this only can be accomplished where the duration, volume and profitability of the business covered by such contracts are sufficiently large as to make deviation more profitable in the long term than honoring the terms of coordination, and buyers likely would switch suppliers.

In some circumstances, coordinated interaction can be effectively prevented or limited by maverick firms -- firms that have a greater economic incentive to deviate from the terms of coordination than do most of their rivals (e.g., firms that are unusually disruptive and competitive influences in the market). Consequently, acquisition of a maverick firm is one way in which a merger may make coordinated interaction more likely, more successful, or more complete. For example, in a market where capacity constraints are significant for many competitors, a firm is more likely to be a maverick the greater is its excess or divertable capacity in relation to its sales or its total capacity, and the lower are its direct and opportunity costs of expanding sales in the relevant market.<sup>19</sup> This is so because a firm's incentive to deviate from price-elevating and output-limiting terms of coordination is greater the more the firm is able profitably to expand its output as a proportion of the sales it would obtain if it adhered to the terms of coordination and the smaller is the base of sales on which it enjoys elevated profits prior to the price cutting deviation.<sup>20</sup> A firm also may be a maverick if it has an unusual ability secretly to expand its sales in relation to the sales it would obtain if it adhered to the terms of coordination. This ability might arise from opportunities to expand captive production for a downstream affiliate.

# 2.2 Lessening of Competition Through Unilateral Effects

A merger may diminish competition even if it does not lead to increased likelihood of successful coordinated interaction, because merging firms may find it profitable to alter their behavior unilaterally following the acquisition by elevating price and suppressing output. Unilateral competitive effects can arise in a variety of different settings. In each setting, particular other factors describing the relevant market affect the likelihood of unilateral competitive effects. The settings differ by the primary characteristics that distinguish firms and shape the nature of their competition.

#### 2.21 Firms Distinguished Primarily by Differentiated Products

In some markets the products are differentiated, so that products sold by different participants in the market are not perfect substitutes for one another. Moreover, different products in the market may vary in the

 $<sup>^{19}</sup>$  But excess capacity in the hands of non-maverick firms may be a potent weapon with which to punish deviations from the terms of coordination.

<sup>&</sup>lt;sup>20</sup> Similarly, in a market where product design or quality is significant, a firm is more likely to be an effective maverick the greater is the sales potential of its products among customers of its rivals, in relation to the sales it would obtain if it adhered to the terms of coordination. The likelihood of expansion responses by a maverick will be analyzed in the same fashion as uncommitted entry or committed entry (see Sections 1.3 and 3) depending on the significance of the sunk costs entailed in expansion.

degree of their substitutability for one another. In this setting, competition may be non-uniform (i.e., localized), so that individual sellers compete more directly with those rivals selling closer substitutes.<sup>21</sup>

A merger between firms in a market for differentiated products may diminish competition by enabling the merged firm to profit by unilaterally raising the price of one or both products above the premerger level. Some of the sales loss due to the price rise merely will be diverted to the product of the merger partner and, depending on relative margins, capturing such sales loss through merger may make the price increase profitable even though it would not have been profitable premerger. Substantial unilateral price elevation in a market for differentiated products requires that there be a significant share of sales in the market accounted for by consumers who regard the products of the merging firms as their first and second choices, and that repositioning of the non-parties' product lines to replace the localized competition lost through the merger be unlikely. The price rise will be greater the closer substitutes are the products of the merging firms, *i.e.*, the more the buyers of one product consider the other product to be their next choice.

#### 2.211 Closeness of the Products of the Merging Firms

The market concentration measures articulated in Section 1 may help assess the extent of the likely competitive effect from a unilateral price elevation by the merged firm notwithstanding the fact that the affected products are differentiated. The market concentration measures provide a measure of this effect if each product's market share is reflective of not only its relative appeal as a first choice to consumers of the merging firms' products but also its relative appeal as a second choice, and hence as a competitive constraint to the first choice.<sup>22</sup> Where this circumstance holds, market

<sup>&</sup>lt;sup>21</sup> Similarly, in some markets sellers are primarily distinguished by their relative advantages in serving different buyers or groups of buyers, and buyers negotiate individually with sellers. Here, for example, sellers may formally bid against one another for the business of a buyer, or each buyer may elicit individual price quotes from multiple sellers. A seller may find it relatively inexpensive to meet the demands of particular buyers or types of buyers, and relatively expensive to meet others' demands. Competition, again, may be localized: sellers compete more directly with those rivals having similar relative advantages in serving particular buyers or groups of buyers. For example, in open outcry auctions, price is determined by the cost of the second lowest-cost seller. A merger involving the first and second lowest-cost sellers could cause prices to rise to the constraining level of the next lowest-cost seller.

<sup>&</sup>lt;sup>22</sup> Information about consumers' actual first and second product choices may be provided by marketing surveys, information from bidding structures, or normal course of business documents from industry participants.

concentration data fall outside the safeharbor regions of Section 1.5, and the merging firms have a combined market share of at least thirty-five percent, the Agency will presume that a significant share of sales in the market are accounted for by consumers who regard the products of the merging firms as their first and second choices.

Purchasers of one of the merging firms' products may be more or less likely to make the other their second choice than market shares alone would indicate. The market shares of the merging firms' products may understate the competitive effect of concern, when, for example, the products of the merging firms are relatively more similar in their various attributes to one another than to other products in the relevant market. On the other hand, the market shares alone may overstate the competitive effects of concern when, for example, the relevant products are less similar in their attributes to one another than to other products in the relevant market.

Where market concentration data fall outside the safeharbor regions of Section 1.5, the merging firms have a combined market share of at least thirty-five percent, and where data on product attributes and relative product appeal show that a significant share of purchasers of one merging firm's product regard the other as their second choice, then market share data may be relied upon to demonstrate that there is a significant share of sales in the market accounted for by consumers who would be adversely affected by the merger.

#### 2.212 Ability of Rival Sellers to Replace Lost Competition

A merger is not likely to lead to unilateral elevation of prices of differentiated products if, in response to such an effect, rival sellers likely would replace any localized competition lost through the merger by repositioning their product lines.<sup>23</sup>

In markets where it is costly for buyers to evaluate product quality, buyers who consider purchasing from both merging parties may limit the total number of sellers they consider. If either of the merging firms would be replaced in such buyers' consideration by an equally competitive seller not formerly considered, then the merger is not likely to lead to a unilateral elevation of prices.

 $<sup>^{23}</sup>$  The timeliness and likelihood of repositioning responses will be analyzed using the same methodology as used in analyzing uncommitted entry or committed entry (see Sections 1.3 and 3), depending on the significance of the sunk costs entailed in repositioning.

#### 2.22 Firms Distinguished Primarily by Their Capacities

Where products are relatively undifferentiated and capacity primarily distinguishes firms and shapes the nature of their competition, the merged firm may find it profitable unilaterally to raise price and suppress output. The merger provides the merged firm a larger base of sales on which to enjoy the resulting price rise and also eliminates a competitor to which customers otherwise would have diverted their sales. Where the merging firms have a combined market share of at least thirty-five percent, merged firms may find it profitable to raise price and reduce joint output below the sum of their premerger outputs because the lost markups on the foregone sales may be outweighed by the resulting price increase on the merged base of sales.

This unilateral effect is unlikely unless a sufficiently large number of the merged firm's customers would not be able to find economical alternative sources of supply, i.e., competitors of the merged firm likely would not respond to the price increase and output reduction by the merged firm with increases in their own outputs sufficient in the aggregate to make the unilateral action of the merged firm unprofitable. Such non-party expansion is unlikely if those firms face binding capacity constraints that could not be economically relaxed within two years or if existing excess capacity is significantly more costly to operate than capacity currently in use.<sup>24</sup>

# 3. Entry Analysis

# 3.0 Overview

A merger is not likely to create or enhance market power or to facilitate its exercise, if entry into the market is so easy that market participants, after the merger, either collectively or unilaterally could not profitably maintain a price increase above premerger levels. Such entry likely will deter an anticompetitive merger in its incipiency, or deter or counteract the competitive effects of concern.

Entry is that easy if entry would be timely, likely, and sufficient in its magnitude, character and scope to deter or counteract the competitive

 $<sup>^{24}</sup>$  The timeliness and likelihood of non-party expansion will be analyzed using the same methodology as used in analyzing uncommitted or committed entry (see Sections 1.3 and 3) depending on the significance of the sunk costs entailed in expansion.

effects of concern. In markets where entry is that easy (i.e., where entry passes these tests of timeliness, likelihood, and sufficiency), the merger raises no antitrust concern and ordinarily requires no further analysis.

The committed entry treated in this Section is defined as new competition that requires expenditure of significant sunk costs of entry and exit.<sup>25</sup> The Agency employs a three-step methodology to assess whether committed entry would deter or counteract a competitive effect of concern.

The first step assesses whether entry can achieve significant market impact within a timely period. If significant market impact would require a longer period, entry will not deter or counteract the competitive effect of concern.

The second step assesses whether committed entry would be a profitable and, hence, a likely response to a merger having competitive effects of concern. Firms considering entry that requires significant sunk costs must evaluate the profitability of the entry on the basis of long term participation in the market, because the underlying assets will be committed to the market until they are economically depreciated. Entry that is sufficient to counteract the competitive effects of concern will cause prices to fall to their premerger levels or lower. Thus, the profitability of such committed entry must be determined on the basis of premerger market prices over the long-term.

A merger having anticompetitive effects can attract committed entry, profitable at premerger prices, that would not have occurred premerger at these same prices. But following the merger, the reduction in industry output and increase in prices associated with the competitive effect of concern may allow the same entry to occur without driving market prices below premerger levels. After a merger that results in decreased output and increased prices, the likely sales opportunities available to entrants at premerger prices will be larger than they were premerger, larger by the output reduction caused by the merger. If entry could be profitable at premerger prices without exceeding the likely sales opportunities -- opportunities that include pre-existing pertinent factors as well as the merger-induced output reduction -- then such entry is likely in response to the merger

The third step assesses whether timely and likely entry would be sufficient to return market prices to their premerger levels. This end may be accomplished either through multiple entry or individual entry at a sufficient

 $<sup>^{25}</sup>$  Supply responses that require less than one year and insignificant sunk costs to effectuate are analyzed as uncommitted entry in Section 1.3.

scale. Entry may not be sufficient, even though timely and likely, where the constraints on availability of essential assets, due to incumbent control, make it impossible for entry profitably to achieve the necessary level of sales. Also, the character and scope of entrants' products might not be fully responsive to the localized sales opportunities created by the removal of direct competition among sellers of differentiated products. In assessing whether entry will be timely, likely, and sufficient, the Agency recognizes that precise and detailed information may be difficult or impossible to obtain. In such instances, the Agency will rely on all available evidence bearing on whether entry will satisfy the conditions of timeliness, likelihood, and sufficiency.

# 3.1 Entry Alternatives

The Agency will examine the timeliness, likelihood, and sufficiency of the means of entry (entry alternatives) a potential entrant might practically employ, without attempting to identify who might be potential entrants. An entry alternative is defined by the actions the firm must take in order to produce and sell in the market. All phases of the entry effort will be considered, including, where relevant, planning, design, and management; permitting, licensing, and other approvals; construction, debugging, and operation of production facilities; and promotion (including necessary introductory discounts), marketing, distribution, and satisfaction of customer testing and qualification requirements.<sup>26</sup> Recent examples of entry, whether successful or unsuccessful, may provide a useful starting point for identifying the necessary actions, time requirements, and characteristics of possible entry alternatives.

# 3.2 Timeliness of Entry

In order to deter or counteract the competitive effects of concern, entrants quickly must achieve a significant impact on price in the relevant market. The Agency generally will consider timely only those committed entry alternatives that can be achieved within two years from initial planning to significant market impact.<sup>27</sup> Where the relevant product is a

<sup>&</sup>lt;sup>26</sup> Many of these phases may be undertaken simultaneously.

durable good, consumers, in response to a significant commitment to entry, may defer purchases by making additional investments to extend the useful life of previously purchased goods and in this way deter or counteract for a time the competitive effects of concern. In these circumstances, if entry only can occur outside of the two year period, the Agency will consider entry to be timely so long as it would deter or counteract the competitive effects of concern within the two-year period and subsequently.

# 3.3 Likelihood of Entry

An entry alternative is likely if it would be profitable at premerger prices, and if such prices could be secured by the entrant.<sup>28</sup> The committed entrant will be unable to secure prices at premerger levels if its output is too large for the market to absorb without depressing prices further. Thus, entry is unlikely if the minimum viable scale is larger than the likely sales opportunity available to entrants.

Minimum viable scale is the smallest average annual level of sales that the committed entrant must persistently achieve for profitability at premerger prices.<sup>29</sup> Minimum viable scale is a function of expected revenues, based upon premerger prices,<sup>30</sup> and all categories of costs associated with the entry alternative, including an appropriate rate of return on invested capital given that entry could fail and sunk costs, if any, will be lost.<sup>31</sup>

<sup>&</sup>lt;sup>27</sup> Firms which have committed to entering the market prior to the merger generally will be included in the measurement of the market. Only committed entry or adjustments to pre-existing entry plans that are induced by the merger will be considered as possibly deterring or counteracting the competitive effects of concern.

<sup>&</sup>lt;sup>28</sup> Where conditions indicate that entry may be profitable at prices below premerger levels, the Agency will assess the likelihood of entry at the lowest price at which such entry would be profitable.

 $<sup>^{29}\,</sup>$  The concept of minimum viable scale ("MVS") differs from the concept of minimum efficient scale ("MES"). While MES is the smallest scale at which average costs are minimized, MVS is the smallest scale at which average costs equal the premerger price.

 $<sup>^{30}\,</sup>$  The expected path of future prices, absent the merger, may be used if future price changes can be predicted with reasonable reliability.

<sup>31</sup> The minimum viable scale of an entry alternative will be relatively large when the fixed costs of entry are large, when the fixed costs of entry are largely sunk, when the marginal costs of production are high at low levels of output, and when a plant is underutilized for a long time because of delays in achieving market acceptance.

Sources of sales opportunities available to entrants include: (a) the output reduction associated with the competitive effect of concern.<sup>32</sup> (b) entrants' ability to capture a share of reasonably expected growth in market demand,<sup>33</sup> (c) entrants' ability securely to divert sales from incumbents, for example, through vertical integration or through forward contracting, and (d) any additional anticipated contraction in incumbents' output in response to entry.<sup>34</sup> Factors that reduce the sales opportunities available to entrants include: (a) the prospect that an entrant will share in a reasonably expected decline in market demand, (b) the exclusion of an entrant from a portion of the market over the long term because of vertical integration or forward contracting by incumbents, and (c) any anticipated sales expansion by incumbents in reaction to entry, either generalized or targeted at customers approached by the entrant, that utilizes prior irreversible investments in excess production capacity. Demand growth or decline will be viewed as relevant only if total market demand is projected to experience long-lasting change during at least the two year period following the competitive effect of concern.

# 3.4 Sufficiency of Entry

Inasmuch as multiple entry generally is possible and individual entrants may flexibly choose their scale, committed entry generally will be sufficient to deter or counteract the competitive effects of concern whenever entry is likely under the analysis of Section 3.3. However, entry, although likely, will not be sufficient if, as a result of incumbent control, the tangible and intangible assets required for entry are not adequately available for entrants to respond fully to their sales opportunities. In addition, where the competitive effect of concern is not uniform across the relevant market, in order for entry to be sufficient, the character and scope of entrants' products must be responsive to the localized sales opportunities that include the output reduction associated with the competitive effect of concern. For exam-

<sup>&</sup>lt;sup>32</sup> Five percent of total market sales typically is used because where a monopolist profitably would raise price by five percent or more across the entire relevant market, it is likely that the accompanying reduction in sales would be no less than five percent.

<sup>&</sup>lt;sup>33</sup> Entrants' anticipated share of growth in demand depends on incumbents' capacity constraints and irreversible investments in capacity expansion, as well as on the relative appeal, acceptability and reputation of incumbents' and entrants' products to the new demand.

 $<sup>^{34}</sup>$  For example, in a bidding market where all bidders are on equal footing, the market share of incumbents will contract as a result of entry.

ple, where the concern is unilateral price elevation as a result of a merger between producers of differentiated products, entry, in order to be sufficient, must involve a product so close to the products of the merging firms that the merged firm will be unable to internalize enough of the sales loss due to the price rise, rendering the price increase unprofitable.

# 4. Efficiencies

# (Revised Section 4 Horizontal Merger Guidelines Issued by the U.S. Department of Justice and the Federal Trade Commission April 8, 1997)

Competition usually spurs firms to achieve efficiencies internally. Nevertheless, mergers have the potential to generate significant efficiencies by permitting a better utilization of existing assets, enabling the combined firm to achieve lower costs in producing a given quantity and quality than either firm could have achieved without the proposed transaction. Indeed, the primary benefit of mergers to the economy is their potential to generate such efficiencies.

Efficiencies generated through merger can enhance the merged firm's ability and incentive to compete, which may result in lower prices, improved quality, enhanced service, or new products. For example, merger-generated efficiencies may enhance competition by permitting two ineffective (e.g., high cost) competitors to become one effective (e.g., lower cost) competitor. In a coordinated interaction context (see Section 2.1), marginal cost reductions may make coordination less likely or effective by enhancing the incentive of a maverick to lower price or by creating a new maverick firm. In a unilateral effects context (see Section 2.2), marginal cost reductions may reduce the merged firm's incentive to elevate price. Efficiencies also may result in benefits in the form of new or improved products, and efficiencies may result in benefits even when price is not immediately and directly affected. Even when efficiencies generated through merger enhance a firm's ability to compete, however, a merger may have other effects that may lessen competition and ultimately may make the merger anticompetitive.

The Agency will consider only those efficiencies likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of either the proposed merger or another means having comparable anticompetitive effects. These are termed *merger-specific efficien*- *cies.*<sup>35</sup> Only alternatives that are practical in the business situation faced by the merging firms will be considered in making this determination; the Agency will not insist upon a less restrictive alternative that is merely theoretical.

Efficiencies are difficult to verify and quantify, in part because much of the information relating to efficiencies is uniquely in the possession of the merging firms. Moreover, efficiencies projected reasonably and in good faith by the merging firms may not be realized. Therefore, the merging firms must substantiate efficiency claims so that the Agency can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), how each would enhance the merged firm's ability and incentive to compete, and why each would be merger-specific. Efficiency claims will not be considered if they are vague or speculative or otherwise cannot be verified by reasonable means.

*Cognizable efficiencies* are merger-specific efficiencies that have been verified and do not arise from anticompetitive reductions in output or service. Cognizable efficiencies are assessed net of costs produced by the merger or incurred in achieving those efficiencies.

The Agency will not challenge a merger if cognizable efficiencies are of a character and magnitude such that the merger is not likely to be anticompetitive in any relevant market.<sup>36</sup> To make the requisite determination, the Agency considers whether cognizable efficiencies likely would be sufficient to reverse the merger's potential to harm consumers in the relevant market, e.g., by preventing price increases in that market. In con-

 $<sup>^{35}</sup>$  The Agency will not deem efficiencies to be merger-specific if they could be preserved by practical alternatives that mitigate competitive concerns, such as divestiture or licensing. If a merger affects not whether but only when an efficiency would be achieved, only the timing advantage is a merger-specific efficiency.

<sup>&</sup>lt;sup>36</sup> Section 7 of the Clayton Act prohibits mergers that may substantially lessen competition "in any line of commerce . . . in any section of the country." Accordingly, the Agency normally assesses competition in each relevant market affected by a merger independently and normally will challenge the merger if it is likely to be anticompetitive in any relevant market. In some cases, however, the Agency in its prosecutorial discretion will consider efficiencies not strictly in the relevant market, but so inextricably linked with it that a partial divestiture or other remedy could not feasibly eliminate the anticompetitive effect in the relevant market without sacrificing the efficiencies in the other market(s). Inextricably linked efficiencies rarely are a significant factor in the Agency's determination not to challenge a merger. They are most likely to make a difference when they are great and the likely anticompetitive effect in the relevant market(s) is small.

ducting this analysis,<sup>37</sup> the Agency will not simply compare the magnitude of the cognizable efficiencies with the magnitude of the likely harm to competition absent the efficiencies. The greater the potential adverse competitive effect of a merger—as indicated by the increase in the HHI and post-merger HHI from Section 1, the analysis of potential adverse competitive effects from Section 2, and the timeliness, likelihood, and sufficiency of entry from Section 3—the greater must be cognizable efficiencies in order for the Agency to conclude that the merger will not have an anticompetitive effect in the relevant market. When the potential adverse competitive effect of a merger is likely to be particularly large, extraordinarily great cognizable efficiencies would be necessary to prevent the merger from being anticompetitive.

In the Agency's experience, efficiencies are most likely to make a difference in merger analysis when the likely adverse competitive effects, absent the efficiencies, are not great. Efficiencies almost never justify a merger to monopoly or near-monopoly.

The Agency has found that certain types of efficiencies are more likely to be cognizable and substantial than others. For example, efficiencies resulting from shifting production among facilities formerly owned separately, which enable the merging firms to reduce the marginal cost of production, are more likely to be susceptible to verification, merger-specific, and substantial, and are less likely to result from anticompetitive reductions in output. Other efficiencies, such as those relating to research and development, are potentially substantial but are generally less susceptible to verification and may be the result of anticompetitive output reductions. Yet others, such as those relating to procurement, management, or capital cost are less likely to be merger-specific or substantial, or may not be cognizable for other reasons.

<sup>37</sup> The result of this analysis over the short term will determine the Agency's enforcement decision in most cases. The Agency also will consider the effects of cognizable efficiencies with no short-term, direct effect on prices in the relevant market. Delayed benefits from efficiencies (due to delay in the achievement of, or the realization of consumer benefits from, the efficiencies) will be given less weight because they are less proximate and more difficult to predict.

# 5. Failure and Exiting Assets

# 5.0 Overview

Notwithstanding the analysis of Sections 1-4 of the Guidelines, a merger is not likely to create or enhance market power or to facilitate its exercise, if imminent failure, as defined below, of one of the merging firms would cause the assets of that firm to exit the relevant market. In such circumstances, post-merger performance in the relevant market may be no worse than market performance had the merger been blocked and the assets left the market.

# 5.1 Failing Firm

A merger is not likely to create or enhance market power or facilitate its exercise if the following circumstances are met: 1) the allegedly failing firm would be unable to meet its financial obligations in the near future; 2) it would not be able to reorganize successfully under Chapter II of the Bankruptcy Act;<sup>38</sup> 3) it has made unsuccessful good-faith efforts to elicit reasonable alternative offers of acquisition of the assets of the failing firm<sup>39</sup> that would both keep its tangible and intangible assets in the relevant market and pose a less severe danger to competition than does the proposed merger; and 4) absent the acquisition, the assets of the failing firm would exit the relevant market

<sup>38 11</sup> U.S.C. §§ 1101-1174 (1988).

 $<sup>^{39}</sup>$  Any offer to purchase the assets of the failing firm for a price above the liquidation value of those assets -- the highest valued use outside the relevant market or equivalent offer to purchase the stock of the failing firm -- will be regarded as a reasonable alternative offer.

# 5.2 Failing Division

A similar argument can be made for "failing" divisions as for failing firms. First, upon applying appropriate cost allocation rules, the division must have a negative cash flow on an operating basis. Second, absent the acquisition, it must be that the assets of the division would exit the relevant market in the near future if not sold. Due to the ability of the parent firm to allocate costs, revenues, and intracompany transactions among itself and its subsidiaries and divisions, the Agency will require evidence, not based solely on management plans that could be prepared solely for the purpose of demonstrating negative cash flow or the prospect of exit from the relevant market. Third, the owner of the failing division also must have complied with the competitively-preferable purchaser requirement of Section 5.1. DOJ/FTC Horizontal Merger Guidelines



# Department of Justice

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#### DEPARTMENT OF JUSTICE AND FEDERAL TRADE COMMISSION ISSUE REVISED HORIZONTAL MERGER GUIDELINES

#### 2010 Guidelines More Accurately Represent Agencies' Merger Review Process

WASHINGTON – The Department of Justice and the Federal Trade Commission (FTC) issued today revised Horizontal Merger Guidelines that outline how the federal antitrust agencies evaluate the likely competitive impact of mergers and whether those mergers comply with U.S. antitrust law. These changes mark the first major revision of the merger guidelines in 18 years, and will give businesses a better understanding of how the agencies evaluate proposed mergers.

A primary goal of the 2010 guidelines is to help the agencies identify and challenge competitively harmful mergers while avoiding unnecessary interference with mergers that either are competitively beneficial or likely will have no competitive impact on the marketplace. To accomplish this, the guidelines detail the techniques and main types of evidence the agencies typically use to predict whether horizontal mergers may substantially lessen competition.

The revised merger guidelines derive from the agencies' collective experience in assessing thousands of transactions focusing on the types of evidence the department and the FTC use to decide whether a merger of competitors may harm competition. Many of the proposed refinements and changes reflect issues previously identified in the "Commentary on the Horizontal Merger Guidelines," which the agencies jointly issued in 2006. In crafting the revisions, the agencies considered a wide range of opinions gathered through a series of joint public workshops, as well as hundreds of public comments submitted by attorneys, academics, economists, consumer groups and businesses.

"The revised guidelines better reflect the agencies' actual practices," said Christine Varney, Assistant Attorney General in charge of the Department of Justice's Antitrust Division. "The guidelines provide more clarity and transparency, and will provide businesses with an even greater understanding of how we review transactions. This has been a successful process due to the commitment of the talented staff from both agencies and the excellent working relationship with the FTC led by Jon Leibowitz."

"Because of the hard work of all involved at both agencies, private parties and judges will be better equipped to understand how the agencies evaluate deals. That improvement in clarity and predictability will benefit everyone," said FTC Chairman Jon Leibowitz. "We thank Christine Varney and her team at DOJ for their terrific work on this initiative, demonstrating once again how effectively and collegially the two agencies work together." The agencies jointly announced the project in September 2009, followed by a series of workshops over the course of the winter. The FTC issued proposed revisions for public comment on April 20, 2010. All of the written comments are posted on the FTC's website at www.ftc.gov/os/comments/hmgrevisedguides/index.shtm.

The 2010 guidelines are different from the 1992 guidelines in several important ways. The guidelines:

- Clarify that merger analysis does not use a single methodology, but is a fact-specific process through which the agencies use a variety of tools to analyze the evidence to determine whether a merger may substantially lessen competition.
- Introduce a new section on "Evidence of Adverse Competitive Effects." This section discusses several categories and sources of evidence that the agencies, in their experience, have found informative in predicting the likely competitive effects of mergers.
- Explain that market definition is not an end itself or a necessary starting point of merger analysis, and market concentration is a tool that is useful to the extent it illuminates the merger's likely competitive effects.
- Provide an updated explanation of the hypothetical monopolist test used to define relevant antitrust markets and how the agencies implement that test in practice.
- Update the concentration thresholds that determine whether a transaction warrants further scrutiny by the agencies.
- Provide an expanded discussion of how the agencies evaluate unilateral competitive effects, including effects on innovation.
- Provide an updated section on coordinated effects. The guidelines clarify that coordinated effects, like unilateral effects, include conduct not otherwise condemned by the antitrust laws.
- Provide a simplified discussion of how the agencies evaluate whether entry into the relevant market is so easy that a merger is not likely to enhance market power.
- Add new sections on powerful buyers, mergers between competing buyers, and partial acquisitions.

The 2010 guidelines are available on the Department of Justice's website at www.justice.gov/atr/public/guidelines/hmg-2010.html.

The Horizontal Merger Guidelines, which were first adopted in 1968, and revised in 1992, serve as an outline of the main analytical techniques, practices and enforcement policies the Department of Justice and the FTC use to evaluate mergers and acquisitions involving actual or potential competitors under federal antitrust laws.

The guidelines issued today take into account the legal and economic developments since the 1992 guidelines were issued. They are not intended to represent a change in the direction of merger review policy, but to offer more clarity on the merger review process to better assist the business community and, in particular, parties to mergers and acquisitions.

The Bank Merger Competitive Review guidelines, which the federal banking agencies and the Department of Justice developed in 1995 to facilitate the competitive review of bank mergers, remain unchanged. The Bank Merger Competitive Review guidelines can be found at www.justice.gov/atr/public/premerger.htm.

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# Horizontal Merger Guidelines





U.S. Department of Justice

and the

Federal Trade Commission

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# 1. Overview

These Guidelines outline the principal analytical techniques, practices, and the enforcement policy of the Department of Justice and the Federal Trade Commission (the "Agencies") with respect to mergers and acquisitions involving actual or potential competitors ("horizontal mergers") under the federal antitrust laws.<sup>1</sup> The relevant statutory provisions include Section 7 of the Clayton Act, 15 U.S.C. § 18, Sections 1 and 2 of the Sherman Act, 15 U.S.C. §§ 1, 2, and Section 5 of the Federal Trade Commission Act, 15 U.S.C. § 45. Most particularly, Section 7 of the Clayton Act prohibits mergers if "in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly."

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

These Guidelines describe the principal analytical techniques and the main types of evidence on which the Agencies usually rely to predict whether a horizontal merger may substantially lessen competition. They are not intended to describe how the Agencies analyze cases other than horizontal mergers. These Guidelines are intended to assist the business community and antitrust practitioners by increasing the transparency of the analytical process underlying the Agencies' enforcement decisions. They may also assist the courts in developing an appropriate framework for interpreting and applying the antitrust laws in the horizontal merger context.

These Guidelines should be read with the awareness that merger analysis does not consist of uniform application of a single methodology. Rather, it is a fact-specific process through which the Agencies, guided by their extensive experience, apply a range of analytical tools to the reasonably available and reliable evidence to evaluate competitive concerns in a limited period of time. Where these Guidelines provide examples, they are illustrative and do not exhaust the applications of the relevant principle.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> These Guidelines replace the Horizontal Merger Guidelines issued in 1992, revised in 1997. They reflect the ongoing accumulation of experience at the Agencies. The Commentary on the Horizontal Merger Guidelines issued by the Agencies in 2006 remains a valuable supplement to these Guidelines. These Guidelines may be revised from time to time as necessary to reflect significant changes in enforcement policy, to clarify existing policy, or to reflect new learning. These Guidelines do not cover vertical or other types of non-horizontal acquisitions.

<sup>&</sup>lt;sup>2</sup> These Guidelines are not intended to describe how the Agencies will conduct the litigation of cases they decide to bring. Although relevant in that context, these Guidelines neither dictate nor exhaust the range of evidence the Agencies may introduce in litigation.

The unifying theme of these Guidelines is that mergers should not be permitted to create, enhance, or entrench market power or to facilitate its exercise. For simplicity of exposition, these Guidelines generally refer to all of these effects as enhancing market power. A merger enhances market power if it is likely to encourage one or more firms to raise price, reduce output, diminish innovation, or otherwise harm customers as a result of diminished competitive constraints or incentives. In evaluating how a merger will likely change a firm's behavior, the Agencies focus primarily on how the merger affects conduct that would be most profitable for the firm.

A merger can enhance market power simply by eliminating competition between the merging parties. This effect can arise even if the merger causes no changes in the way other firms behave. Adverse competitive effects arising in this manner are referred to as "unilateral effects." A merger also can enhance market power by increasing the risk of coordinated, accommodating, or interdependent behavior among rivals. Adverse competitive effects arising in this manner are referred to as "coordinated effects." In any given case, either or both types of effects may be present, and the distinction between them may be blurred.

These Guidelines principally describe how the Agencies analyze mergers between rival suppliers that may enhance their market power as sellers. Enhancement of market power by sellers often elevates the prices charged to customers. For simplicity of exposition, these Guidelines generally discuss the analysis in terms of such price effects. Enhanced market power can also be manifested in non-price terms and conditions that adversely affect customers, including reduced product quality, reduced product variety, reduced service, or diminished innovation. Such non-price effects may coexist with price effects, or can arise in their absence. When the Agencies investigate whether a merger may lead to a substantial lessening of non-price competition, they employ an approach analogous to that used to evaluate price competition. Enhanced market power may also make it more likely that the merged entity can profitably and effectively engage in exclusionary conduct. Regardless of how enhanced market power likely would be manifested, the Agencies normally evaluate mergers based on their impact on customers. The Agencies presume, absent convincing evidence to the contrary, that adverse effects on direct customers also cause adverse effects on final consumers.

Enhancement of market power by buyers, sometimes called "monopsony power," has adverse effects comparable to enhancement of market power by sellers. The Agencies employ an analogous framework to analyze mergers between rival purchasers that may enhance their market power as buyers. See Section 12.

# 2. Evidence of Adverse Competitive Effects

The Agencies consider any reasonably available and reliable evidence to address the central question of whether a merger may substantially lessen competition. This section discusses several categories and sources of evidence that the Agencies, in their experience, have found most informative in predicting the likely competitive effects of mergers. The list provided here is not exhaustive. In any given case, reliable evidence may be available in only some categories or from some sources. For each category of evidence, the Agencies consider evidence indicating that the merger may enhance competition as well as evidence indicating that it may lessen competition.

# 2.1 Types of Evidence

#### 2.1.1 Actual Effects Observed in Consummated Mergers

When evaluating a consummated merger, the ultimate issue is not only whether adverse competitive effects have already resulted from the merger, but also whether such effects are likely to arise in the future. Evidence of observed post-merger price increases or other changes adverse to customers is given substantial weight. The Agencies evaluate whether such changes are anticompetitive effects resulting from the merger, in which case they can be dispositive. However, a consummated merger may be anticompetitive even if such effects have not yet been observed, perhaps because the merged firm may be aware of the possibility of post-merger antitrust review and moderating its conduct. Consequently, the Agencies also consider the same types of evidence they consider when evaluating unconsummated mergers.

#### 2.1.2 Direct Comparisons Based on Experience

The Agencies look for historical events, or "natural experiments," that are informative regarding the competitive effects of the merger. For example, the Agencies may examine the impact of recent mergers, entry, expansion, or exit in the relevant market. Effects of analogous events in similar markets may also be informative.

The Agencies also look for reliable evidence based on variations among similar markets. For example, if the merging firms compete in some locales but not others, comparisons of prices charged in regions where they do and do not compete may be informative regarding post-merger prices. In some cases, however, prices are set on such a broad geographic basis that such comparisons are not informative. The Agencies also may examine how prices in similar markets vary with the number of significant competitors in those markets.

# 2.1.3 Market Shares and Concentration in a Relevant Market

The Agencies give weight to the merging parties' market shares in a relevant market, the level of concentration, and the change in concentration caused by the merger. See Sections 4 and 5. Mergers that cause a significant increase in concentration and result in highly concentrated markets are presumed to be likely to enhance market power, but this presumption can be rebutted by persuasive evidence showing that the merger is unlikely to enhance market power.

#### 2.1.4 Substantial Head-to-Head Competition

The Agencies consider whether the merging firms have been, or likely will become absent the merger, substantial head-to-head competitors. Such evidence can be especially relevant for evaluating adverse unilateral effects, which result directly from the loss of that competition. See Section 6. This evidence can also inform market definition. See Section 4.

# 2.1.5 Disruptive Role of a Merging Party

The Agencies consider whether a merger may lessen competition by eliminating a "maverick" firm, i.e., a firm that plays a disruptive role in the market to the benefit of customers. For example, if one of the merging firms has a strong incumbency position and the other merging firm threatens to

disrupt market conditions with a new technology or business model, their merger can involve the loss of actual or potential competition. Likewise, one of the merging firms may have the incentive to take the lead in price cutting or other competitive conduct or to resist increases in industry prices. A firm that may discipline prices based on its ability and incentive to expand production rapidly using available capacity also can be a maverick, as can a firm that has often resisted otherwise prevailing industry norms to cooperate on price setting or other terms of competition.

# 2.2 Sources of Evidence

The Agencies consider many sources of evidence in their merger analysis. The most common sources of reasonably available and reliable evidence are the merging parties, customers, other industry participants, and industry observers.

#### 2.2.1 Merging Parties

The Agencies typically obtain substantial information from the merging parties. This information can take the form of documents, testimony, or data, and can consist of descriptions of competitively relevant conditions or reflect actual business conduct and decisions. Documents created in the normal course are more probative than documents created as advocacy materials in merger review. Documents describing industry conditions can be informative regarding the operation of the market and how a firm identifies and assesses its rivals, particularly when business decisions are made in reliance on the accuracy of those descriptions. The business decisions taken by the merging firms also can be informative about industry conditions. For example, if a firm sets price well above incremental cost, that normally indicates either that the firm believes its customers are not highly sensitive to price (not in itself of antitrust concern, see Section 4.1.3<sup>3</sup>) or that the firm and its rivals are engaged in coordinated interaction (see Section 7). Incremental cost depends on the relevant increment in output as well as on the time period involved, and in the case of large increments and sustained changes in output it may include some costs that would be fixed for smaller increments of output or shorter time periods.

Explicit or implicit evidence that the merging parties intend to raise prices, reduce output or capacity, reduce product quality or variety, withdraw products or delay their introduction, or curtail research and development efforts after the merger, or explicit or implicit evidence that the ability to engage in such conduct motivated the merger, can be highly informative in evaluating the likely effects of a merger. Likewise, the Agencies look for reliable evidence that the merger is likely to result in efficiencies. The Agencies give careful consideration to the views of individuals whose responsibilities, expertise, and experience relating to the issues in question provide particular indicia of reliability. The financial terms of the transaction may also be informative regarding competitive effects. For example, a purchase price in excess of the acquired firm's stand-alone market value may indicate that the acquiring firm is paying a premium because it expects to be able to reduce competition or to achieve efficiencies.

<sup>&</sup>lt;sup>3</sup> High margins commonly arise for products that are significantly differentiated. Products involving substantial fixed costs typically will be developed only if suppliers expect there to be enough differentiation to support margins sufficient to cover those fixed costs. High margins can be consistent with incumbent firms earning competitive returns.

#### 2.2.2 *Customers*

Customers can provide a variety of information to the Agencies, ranging from information about their own purchasing behavior and choices to their views about the effects of the merger itself.

Information from customers about how they would likely respond to a price increase, and the relative attractiveness of different products or suppliers, may be highly relevant, especially when corroborated by other evidence such as historical purchasing patterns and practices. Customers also can provide valuable information about the impact of historical events such as entry by a new supplier.

The conclusions of well-informed and sophisticated customers on the likely impact of the merger itself can also help the Agencies investigate competitive effects, because customers typically feel the consequences of both competitively beneficial and competitively harmful mergers. In evaluating such evidence, the Agencies are mindful that customers may oppose, or favor, a merger for reasons unrelated to the antitrust issues raised by that merger.

When some customers express concerns about the competitive effects of a merger while others view the merger as beneficial or neutral, the Agencies take account of this divergence in using the information provided by customers and consider the likely reasons for such divergence of views. For example, if for regulatory reasons some customers cannot buy imported products, while others can, a merger between domestic suppliers may harm the former customers even if it leaves the more flexible customers unharmed. See Section 3.

When direct customers of the merging firms compete against one another in a downstream market, their interests may not be aligned with the interests of final consumers, especially if the direct customers expect to pass on any anticompetitive price increase. A customer that is protected from adverse competitive effects by a long-term contract, or otherwise relatively immune from the merger's harmful effects, may even welcome an anticompetitive merger that provides that customer with a competitive advantage over its downstream rivals.

*Example 1:* As a result of the merger, Customer C will experience a price increase for an input used in producing its final product, raising its costs. Customer C's rivals use this input more intensively than Customer C, and the same price increase applied to them will raise their costs more than it raises Customer C's costs. On balance, Customer C may benefit from the merger even though the merger involves a substantial lessening of competition.

#### 2.2.3 Other Industry Participants and Observers

Suppliers, indirect customers, distributors, other industry participants, and industry analysts can also provide information helpful to a merger inquiry. The interests of firms selling products complementary to those offered by the merging firms often are well aligned with those of customers, making their informed views valuable.

Information from firms that are rivals to the merging parties can help illuminate how the market operates. The interests of rival firms often diverge from the interests of customers, since customers normally lose, but rival firms gain, if the merged entity raises its prices. For that reason, the Agencies do not routinely rely on the overall views of rival firms regarding the competitive effects of the

merger. However, rival firms may provide relevant facts, and even their overall views may be instructive, especially in cases where the Agencies are concerned that the merged entity may engage in exclusionary conduct.

*Example 2:* Merging Firms A and B operate in a market in which network effects are significant, implying that any firm's product is significantly more valuable if it commands a large market share or if it is interconnected with others that in aggregate command such a share. Prior to the merger, they and their rivals voluntarily interconnect with one another. The merger would create an entity with a large enough share that a strategy of ending voluntary interconnection would have a dangerous probability of creating monopoly power in this market. The interests of rivals and of consumers would be broadly aligned in preventing such a merger.

# **3.** Targeted Customers and Price Discrimination

When examining possible adverse competitive effects from a merger, the Agencies consider whether those effects vary significantly for different customers purchasing the same or similar products. Such differential impacts are possible when sellers can discriminate, e.g., by profitably raising price to certain targeted customers but not to others. The possibility of price discrimination influences market definition (see Section 4), the measurement of market shares (see Section 5), and the evaluation of competitive effects (see Sections 6 and 7).

When price discrimination is feasible, adverse competitive effects on targeted customers can arise, even if such effects will not arise for other customers. A price increase for targeted customers may be profitable even if a price increase for all customers would not be profitable because too many other customers would substitute away. When discrimination is reasonably likely, the Agencies may evaluate competitive effects separately by type of customer. The Agencies may have access to information unavailable to customers that is relevant to evaluating whether discrimination is reasonably likely.

For price discrimination to be feasible, two conditions typically must be met: differential pricing and limited arbitrage.

First, the suppliers engaging in price discrimination must be able to price differently to targeted customers than to other customers. This may involve identification of individual customers to which different prices are offered or offering different prices to different types of customers based on observable characteristics.

*Example 3:* Suppliers can distinguish large buyers from small buyers. Large buyers are more likely than small buyers to self-supply in response to a significant price increase. The merger may lead to price discrimination against small buyers, harming them, even if large buyers are not harmed. Such discrimination can occur even if there is no discrete gap in size between the classes of large and small buyers.

In other cases, suppliers may be unable to distinguish among different types of customers but can offer multiple products that sort customers based on their purchase decisions.

Second, the targeted customers must not be able to defeat the price increase of concern by arbitrage, e.g., by purchasing indirectly from or through other customers. Arbitrage may be difficult if it would void warranties or make service more difficult or costly for customers. Arbitrage is inherently impossible for many services. Arbitrage between customers at different geographic locations may be

impractical due to transportation costs. Arbitrage on a modest scale may be possible but sufficiently costly or limited that it would not deter or defeat a discriminatory pricing strategy.

# 4. Market Definition

When the Agencies identify a potential competitive concern with a horizontal merger, market definition plays two roles. First, market definition helps specify the line of commerce and section of the country in which the competitive concern arises. In any merger enforcement action, the Agencies will normally identify one or more relevant markets in which the merger may substantially lessen competition. Second, market definition allows the Agencies to identify market participants and measure market shares and market concentration. See Section 5. The measurement of market shares and market concentration is not an end in itself, but is useful to the extent it illuminates the merger's likely competitive effects.

The Agencies' analysis need not start with market definition. Some of the analytical tools used by the Agencies to assess competitive effects do not rely on market definition, although evaluation of competitive alternatives available to customers is always necessary at some point in the analysis.

Evidence of competitive effects can inform market definition, just as market definition can be informative regarding competitive effects. For example, evidence that a reduction in the number of significant rivals offering a group of products causes prices for those products to rise significantly can itself establish that those products form a relevant market. Such evidence also may more directly predict the competitive effects of a merger, reducing the role of inferences from market definition and market shares.

Where analysis suggests alternative and reasonably plausible candidate markets, and where the resulting market shares lead to very different inferences regarding competitive effects, it is particularly valuable to examine more direct forms of evidence concerning those effects.

Market definition focuses solely on demand substitution factors, i.e., on customers' ability and willingness to substitute away from one product to another in response to a price increase or a corresponding non-price change such as a reduction in product quality or service. The responsive actions of suppliers are also important in competitive analysis. They are considered in these Guidelines in the sections addressing the identification of market participants, the measurement of market shares, the analysis of competitive effects, and entry.

Customers often confront a range of possible substitutes for the products of the merging firms. Some substitutes may be closer, and others more distant, either geographically or in terms of product attributes and perceptions. Additionally, customers may assess the proximity of different products differently. When products or suppliers in different geographic areas are substitutes for one another to varying degrees, defining a market to include some substitutes and exclude others is inevitably a simplification that cannot capture the full variation in the extent to which different products compete against each other. The principles of market definition outlined below seek to make this inevitable simplification as useful and informative as is practically possible. Relevant markets need not have precise metes and bounds.

Defining a market broadly to include relatively distant product or geographic substitutes can lead to misleading market shares. This is because the competitive significance of distant substitutes is unlikely to be commensurate with their shares in a broad market. Although excluding more distant substitutes from the market inevitably understates their competitive significance to some degree, doing so often provides a more accurate indicator of the competitive effects of the merger than would the alternative of including them and overstating their competitive significance as proportional to their shares in an expanded market.

*Example 4:* Firms A and B, sellers of two leading brands of motorcycles, propose to merge. If Brand A motorcycle prices were to rise, some buyers would substitute to Brand B, and some others would substitute to cars. However, motorcycle buyers see Brand B motorcycles as much more similar to Brand A motorcycles than are cars. Far more cars are sold than motorcycles. Evaluating shares in a market that includes cars would greatly underestimate the competitive significance of Brand B motorcycles in constraining Brand A's prices and greatly overestimate the significance of cars.

Market shares of different products in narrowly defined markets are more likely to capture the relative competitive significance of these products, and often more accurately reflect competition between close substitutes. As a result, properly defined antitrust markets often exclude some substitutes to which some customers might turn in the face of a price increase even if such substitutes provide alternatives for those customers. However, a group of products is too narrow to constitute a relevant market if competition from products outside that group is so ample that even the complete elimination of competition within the group would not significantly harm either direct customers or downstream consumers. The hypothetical monopolist test (see Section 4.1.1) is designed to ensure that candidate markets are not overly narrow in this respect.

The Agencies implement these principles of market definition flexibly when evaluating different possible candidate markets. Relevant antitrust markets defined according to the hypothetical monopolist test are not always intuitive and may not align with how industry members use the term "market."

Section 4.1 describes the principles that apply to product market definition, and gives guidance on how the Agencies most often apply those principles. Section 4.2 describes how the same principles apply to geographic market definition. Although discussed separately for simplicity of exposition, the principles described in Sections 4.1 and 4.2 are combined to define a relevant market, which has both a product and a geographic dimension. In particular, the hypothetical monopolist test is applied to a group of products together with a geographic region to determine a relevant market.

# 4.1 **Product Market Definition**

When a product sold by one merging firm (Product A) competes against one or more products sold by the other merging firm, the Agencies define a relevant product market around Product A to evaluate the importance of that competition. Such a relevant product market consists of a group of substitute products including Product A. Multiple relevant product markets may thus be identified.

#### 4.1.1 The Hypothetical Monopolist Test

The Agencies employ the hypothetical monopolist test to evaluate whether groups of products in candidate markets are sufficiently broad to constitute relevant antitrust markets. The Agencies use the

hypothetical monopolist test to identify a set of products that are reasonably interchangeable with a product sold by one of the merging firms.

The hypothetical monopolist test requires that a product market contain enough substitute products so that it could be subject to post-merger exercise of market power significantly exceeding that existing absent the merger. Specifically, the test requires that a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future seller of those products ("hypothetical monopolist") likely would impose at least a small but significant and non-transitory increase in price ("SSNIP") on at least one product in the market, including at least one product sold by one of the merging firms.<sup>4</sup> For the purpose of analyzing this issue, the terms of sale of products outside the candidate market are held constant. The SSNIP is employed solely as a methodological tool for performing the hypothetical monopolist test; it is not a tolerance level for price increases resulting from a merger.

Groups of products may satisfy the hypothetical monopolist test without including the full range of substitutes from which customers choose. The hypothetical monopolist test may identify a group of products as a relevant market even if customers would substitute significantly to products outside that group in response to a price increase.

*Example 5:* Products A and B are being tested as a candidate market. Each sells for \$100, has an incremental cost of \$60, and sells 1200 units. For every dollar increase in the price of Product A, for any given price of Product B, Product A loses twenty units of sales to products outside the candidate market and ten units of sales to Product B, and likewise for Product B. Under these conditions, economic analysis shows that a hypothetical profit-maximizing monopolist controlling Products A and B would raise both of their prices by ten percent, to \$110. Therefore, Products A and B satisfy the hypothetical monopolist test using a five percent SSNIP, and indeed for any SSNIP size up to ten percent. This is true even though two-thirds of the sales lost by one product when it raises its price are diverted to products outside the relevant market.

When applying the hypothetical monopolist test to define a market around a product offered by one of the merging firms, if the market includes a second product, the Agencies will normally also include a third product if that third product is a closer substitute for the first product than is the second product. The third product is a closer substitute if, in response to a SSNIP on the first product, greater revenues are diverted to the third product than to the second product.

*Example 6:* In Example 5, suppose that half of the unit sales lost by Product A when it raises its price are diverted to Product C, which also has a price of \$100, while one-third are diverted to Product B. Product C is a closer substitute for Product A than is Product B. Thus Product C will normally be included in the relevant market, even though Products A and B together satisfy the hypothetical monopolist test.

The hypothetical monopolist test ensures that markets are not defined too narrowly, but it does not lead to a single relevant market. The Agencies may evaluate a merger in any relevant market

<sup>&</sup>lt;sup>4</sup> If the pricing incentives of the firms supplying the products in the candidate market differ substantially from those of the hypothetical monopolist, for reasons other than the latter's control over a larger group of substitutes, the Agencies may instead employ the concept of a hypothetical profit-maximizing cartel comprised of the firms (with all their products) that sell the products in the candidate market. This approach is most likely to be appropriate if the merging firms sell products outside the candidate market that significantly affect their pricing incentives for products in the candidate market is one for durable equipment and the firms selling that equipment derive substantial net revenues from selling spare parts and service for that equipment.

satisfying the test, guided by the overarching principle that the purpose of defining the market and measuring market shares is to illuminate the evaluation of competitive effects. Because the relative competitive significance of more distant substitutes is apt to be overstated by their share of sales, when the Agencies rely on market shares and concentration, they usually do so in the smallest relevant market satisfying the hypothetical monopolist test.

*Example 7:* In Example 4, including cars in the market will lead to misleadingly small market shares for motorcycle producers. Unless motorcycles fail the hypothetical monopolist test, the Agencies would not include cars in the market in analyzing this motorcycle merger.

#### 4.1.2 Benchmark Prices and SSNIP Size

The Agencies apply the SSNIP starting from prices that would likely prevail absent the merger. If prices are not likely to change absent the merger, these benchmark prices can reasonably be taken to be the prices prevailing prior to the merger.<sup>5</sup> If prices are likely to change absent the merger, e.g., because of innovation or entry, the Agencies may use anticipated future prices as the benchmark for the test. If prices might fall absent the merger due to the breakdown of pre-merger coordination, the Agencies may use those lower prices as the benchmark for the test. In some cases, the techniques employed by the Agencies to implement the hypothetical monopolist test focus on the difference in incentives between pre-merger firms and the hypothetical monopolist and do not require specifying the benchmark prices.

The SSNIP is intended to represent a "small but significant" increase in the prices charged by firms in the candidate market for the value they contribute to the products or services used by customers. This properly directs attention to the effects of price changes commensurate with those that might result from a significant lessening of competition caused by the merger. This methodology is used because normally it is possible to quantify "small but significant" adverse price effects on customers and analyze their likely reactions, not because price effects are more important than non-price effects.

The Agencies most often use a SSNIP of five percent of the price paid by customers for the products or services to which the merging firms contribute value. However, what constitutes a "small but significant" increase in price, commensurate with a significant loss of competition caused by the merger, depends upon the nature of the industry and the merging firms' positions in it, and the Agencies may accordingly use a price increase that is larger or smaller than five percent. Where explicit or implicit prices for the firms' specific contribution to value can be identified with reasonable clarity, the Agencies may base the SSNIP on those prices.

*Example 8:* In a merger between two oil pipelines, the SSNIP would be based on the price charged for transporting the oil, not on the price of the oil itself. If pipelines buy the oil at one end and sell it at the other, the price charged for transporting the oil is implicit, equal to the difference between the price paid for oil at the input end and the price charged for oil at the output end. The relevant product sold by the pipelines is better described as "pipeline transportation of oil from point A to point B" than as "oil at point B."

<sup>&</sup>lt;sup>5</sup> Market definition for the evaluation of non-merger antitrust concerns such as monopolization or facilitating practices will differ in this respect if the effects resulting from the conduct of concern are already occurring at the time of evaluation.

*Example 9:* In a merger between two firms that install computers purchased from third parties, the SSNIP would be based on their fees, not on the price of installed computers. If these firms purchase the computers and charge their customers one package price, the implicit installation fee is equal to the package charge to customers less the price of the computers.

*Example 10:* In Example 9, suppose that the prices paid by the merging firms to purchase computers are opaque, but account for at least ninety-five percent of the prices they charge for installed computers, with profits or implicit fees making up five percent of those prices at most. A five percent SSNIP on the total price paid by customers would at least double those fees or profits. Even if that would be unprofitable for a hypothetical monopolist, a significant increase in fees might well be profitable. If the SSNIP is based on the total price paid by customers, a lower percentage will be used.

#### 4.1.3 Implementing the Hypothetical Monopolist Test

The hypothetical monopolist's incentive to raise prices depends both on the extent to which customers would likely substitute away from the products in the candidate market in response to such a price increase and on the profit margins earned on those products. The profit margin on incremental units is the difference between price and incremental cost on those units. The Agencies often estimate incremental costs, for example using merging parties' documents or data the merging parties use to make business decisions. Incremental cost is measured over the change in output that would be caused by the price increase under consideration.

In considering customers' likely responses to higher prices, the Agencies take into account any reasonably available and reliable evidence, including, but not limited to:

- how customers have shifted purchases in the past in response to relative changes in price or other terms and conditions;
- information from buyers, including surveys, concerning how they would respond to price changes;
- the conduct of industry participants, notably:
  - sellers' business decisions or business documents indicating sellers' informed beliefs concerning how customers would substitute among products in response to relative changes in price;
  - industry participants' behavior in tracking and responding to price changes by some or all rivals;
- objective information about product characteristics and the costs and delays of switching products, especially switching from products in the candidate market to products outside the candidate market;
- the percentage of sales lost by one product in the candidate market, when its price alone rises, that is recaptured by other products in the candidate market, with a higher recapture percentage making a price increase more profitable for the hypothetical monopolist;
- evidence from other industry participants, such as sellers of complementary products;

- legal or regulatory requirements; and
- the influence of downstream competition faced by customers in their output markets.

When the necessary data are available, the Agencies also may consider a "critical loss analysis" to assess the extent to which it corroborates inferences drawn from the evidence noted above. Critical loss analysis asks whether imposing at least a SSNIP on one or more products in a candidate market would raise or lower the hypothetical monopolist's profits. While this "breakeven" analysis differs from the profit-maximizing analysis called for by the hypothetical monopolist test in Section 4.1.1, merging parties sometimes present this type of analysis to the Agencies. A price increase raises profits on sales made at the higher price, but this will be offset to the extent customers substitute away from products in the candidate market. Critical loss analysis compares the magnitude of these two offsetting effects resulting from the price increase. The "critical loss" is defined as the number of lost unit sales that would leave profits unchanged. The "predicted loss" is defined as the number of unit sales that the hypothetical monopolist is predicted to lose due to the price increase. The price increase raises the hypothetical monopolist's profits if the predicted loss is less than the critical loss.

The Agencies consider all of the evidence of customer substitution noted above in assessing the predicted loss. The Agencies require that estimates of the predicted loss be consistent with that evidence, including the pre-merger margins of products in the candidate market used to calculate the critical loss. Unless the firms are engaging in coordinated interaction (see Section 7), high pre-merger margins normally indicate that each firm's product individually faces demand that is not highly sensitive to price.<sup>6</sup> Higher pre-merger margins thus indicate a smaller predicted loss as well as a smaller critical loss. The higher the pre-merger margin, the smaller the recapture percentage necessary for the candidate market to satisfy the hypothetical monopolist test.

Even when the evidence necessary to perform the hypothetical monopolist test quantitatively is not available, the conceptual framework of the test provides a useful methodological tool for gathering and analyzing evidence pertinent to customer substitution and to market definition. The Agencies follow the hypothetical monopolist test to the extent possible given the available evidence, bearing in mind that the ultimate goal of market definition is to help determine whether the merger may substantially lessen competition.

# 4.1.4 Product Market Definition with Targeted Customers

If a hypothetical monopolist could profitably target a subset of customers for price increases, the Agencies may identify relevant markets defined around those targeted customers, to whom a hypothetical monopolist would profitably and separately impose at least a SSNIP. Markets to serve targeted customers are also known as price discrimination markets. In practice, the Agencies identify price discrimination markets only where they believe there is a realistic prospect of an adverse competitive effect on a group of targeted customers.

*Example 11:* Glass containers have many uses. In response to a price increase for glass containers, some users would substitute substantially to plastic or metal containers, but baby food manufacturers would not. If a

<sup>&</sup>lt;sup>6</sup> While margins are important for implementing the hypothetical monopolist test, high margins are not in themselves of antitrust concern.

hypothetical monopolist could price separately and limit arbitrage, baby food manufacturers would be vulnerable to a targeted increase in the price of glass containers. The Agencies could define a distinct market for glass containers used to package baby food.

The Agencies also often consider markets for targeted customers when prices are individually negotiated and suppliers have information about customers that would allow a hypothetical monopolist to identify customers that are likely to pay a higher price for the relevant product. If prices are negotiated individually with customers, the hypothetical monopolist test may suggest relevant markets that are as narrow as individual customers (see also Section 6.2 on bargaining and auctions). Nonetheless, the Agencies often define markets for groups of targeted customers, i.e., by type of customer, rather than by individual customer. By so doing, the Agencies are able to rely on aggregated market shares that can be more helpful in predicting the competitive effects of the merger.

# 4.2 Geographic Market Definition

The arena of competition affected by the merger may be geographically bounded if geography limits some customers' willingness or ability to substitute to some products, or some suppliers' willingness or ability to serve some customers. Both supplier and customer locations can affect this. The Agencies apply the principles of market definition described here and in Section 4.1 to define a relevant market with a geographic dimension as well as a product dimension.

The scope of geographic markets often depends on transportation costs. Other factors such as language, regulation, tariff and non-tariff trade barriers, custom and familiarity, reputation, and service availability may impede long-distance or international transactions. The competitive significance of foreign firms may be assessed at various exchange rates, especially if exchange rates have fluctuated in the recent past.

In the absence of price discrimination based on customer location, the Agencies normally define geographic markets based on the locations of suppliers, as explained in subsection 4.2.1. In other cases, notably if price discrimination based on customer location is feasible as is often the case when delivered pricing is commonly used in the industry, the Agencies may define geographic markets based on the locations of customers, as explained in subsection 4.2.2.

#### 4.2.1 Geographic Markets Based on the Locations of Suppliers

Geographic markets based on the locations of suppliers encompass the region from which sales are made. Geographic markets of this type often apply when customers receive goods or services at suppliers' locations. Competitors in the market are firms with relevant production, sales, or service facilities in that region. Some customers who buy from these firms may be located outside the boundaries of the geographic market.

The hypothetical monopolist test requires that a hypothetical profit-maximizing firm that was the only present or future producer of the relevant product(s) located in the region would impose at least a SSNIP from at least one location, including at least one location of one of the merging firms. In this exercise the terms of sale for all products produced elsewhere are held constant. A single firm may operate in a number of different geographic markets, even for a single product.

*Example 12:* The merging parties both have manufacturing plants in City X. The relevant product is expensive to transport and suppliers price their products for pickup at their locations. Rival plants are some distance away in City Y. A hypothetical monopolist controlling all plants in City X could profitably impose a SSNIP at these plants. Competition from more distant plants would not defeat the price increase because supplies coming from more distant plants require expensive transportation. The relevant geographic market is defined around the plants in City X.

When the geographic market is defined based on supplier locations, sales made by suppliers located in the geographic market are counted, regardless of the location of the customer making the purchase.

In considering likely reactions of customers to price increases for the relevant product(s) imposed in a candidate geographic market, the Agencies consider any reasonably available and reliable evidence, including:

- how customers have shifted purchases in the past between different geographic locations in response to relative changes in price or other terms and conditions;
- the cost and difficulty of transporting the product (or the cost and difficulty of a customer traveling to a seller's location), in relation to its price;
- whether suppliers need a presence near customers to provide service or support;
- evidence on whether sellers base business decisions on the prospect of customers switching between geographic locations in response to relative changes in price or other competitive variables;
- the costs and delays of switching from suppliers in the candidate geographic market to suppliers outside the candidate geographic market; and
- the influence of downstream competition faced by customers in their output markets.

#### 4.2.2 Geographic Markets Based on the Locations of Customers

When the hypothetical monopolist could discriminate based on customer location, the Agencies may define geographic markets based on the locations of targeted customers.<sup>7</sup> Geographic markets of this type often apply when suppliers deliver their products or services to customers' locations. Geographic markets of this type encompass the region into which sales are made. Competitors in the market are firms that sell to customers in the specified region. Some suppliers that sell into the relevant market may be located outside the boundaries of the geographic market.

The hypothetical monopolist test requires that a hypothetical profit-maximizing firm that was the only present or future seller of the relevant product(s) to customers in the region would impose at least a SSNIP on some customers in that region. A region forms a relevant geographic market if this price increase would not be defeated by substitution away from the relevant product or by arbitrage,

<sup>&</sup>lt;sup>7</sup> For customers operating in multiple locations, only those customer locations within the targeted zone are included in the market.

e.g., customers in the region travelling outside it to purchase the relevant product. In this exercise, the terms of sale for products sold to all customers outside the region are held constant.

*Example 13:* Customers require local sales and support. Suppliers have sales and service operations in many geographic areas and can discriminate based on customer location. The geographic market can be defined around the locations of customers.

*Example 14:* Each merging firm has a single manufacturing plant and delivers the relevant product to customers in City X and in City Y. The relevant product is expensive to transport. The merging firms' plants are by far the closest to City X, but no closer to City Y than are numerous rival plants. This fact pattern suggests that customers in City X may be harmed by the merger even if customers in City Y are not. For that reason, the Agencies consider a relevant geographic market defined around customers in City X. Such a market could be defined even if the region around the merging firms' plants would not be a relevant geographic market defined based on the location of sellers because a hypothetical monopolist controlling all plants in that region would find a SSNIP imposed on all of its customers unprofitable due to the loss of sales to customers in City Y.

When the geographic market is defined based on customer locations, sales made to those customers are counted, regardless of the location of the supplier making those sales.

*Example 15:* Customers in the United States must use products approved by U.S. regulators. Foreign customers use products not approved by U.S. regulators. The relevant product market consists of products approved by U.S. regulators. The geographic market is defined around U.S. customers. Any sales made to U.S. customers by foreign suppliers are included in the market, and those foreign suppliers are participants in the U.S. market even though located outside it.

# 5. Market Participants, Market Shares, and Market Concentration

The Agencies normally consider measures of market shares and market concentration as part of their evaluation of competitive effects. The Agencies evaluate market shares and concentration in conjunction with other reasonably available and reliable evidence for the ultimate purpose of determining whether a merger may substantially lessen competition.

Market shares can directly influence firms' competitive incentives. For example, if a price reduction to gain new customers would also apply to a firm's existing customers, a firm with a large market share may be more reluctant to implement a price reduction than one with a small share. Likewise, a firm with a large market share may not feel pressure to reduce price even if a smaller rival does. Market shares also can reflect firms' capabilities. For example, a firm with a large market share may be able to expand output rapidly by a larger absolute amount than can a small firm. Similarly, a large market share tends to indicate low costs, an attractive product, or both.

# 5.1 Market Participants

All firms that currently earn revenues in the relevant market are considered market participants. Vertically integrated firms are also included to the extent that their inclusion accurately reflects their competitive significance. Firms not currently earning revenues in the relevant market, but that have committed to entering the market in the near future, are also considered market participants.

Firms that are not current producers in a relevant market, but that would very likely provide rapid supply responses with direct competitive impact in the event of a SSNIP, without incurring

significant sunk costs, are also considered market participants. These firms are termed "rapid entrants." Sunk costs are entry or exit costs that cannot be recovered outside the relevant market. Entry that would take place more slowly in response to adverse competitive effects, or that requires firms to incur significant sunk costs, is considered in Section 9.

Firms that produce the relevant product but do not sell it in the relevant geographic market may be rapid entrants. Other things equal, such firms are most likely to be rapid entrants if they are close to the geographic market.

*Example 16:* Farm A grows tomatoes halfway between Cities X and Y. Currently, it ships its tomatoes to City X because prices there are two percent higher. Previously it has varied the destination of its shipments in response to small price variations. Farm A would likely be a rapid entrant participant in a market for tomatoes in City Y.

*Example 17:* Firm B has bid multiple times to supply milk to School District S, and actually supplies milk to schools in some adjacent areas. It has never won a bid in School District S, but is well qualified to serve that district and has often nearly won. Firm B would be counted as a rapid entrant in a market for school milk in School District S.

More generally, if the relevant market is defined around targeted customers, firms that produce relevant products but do not sell them to those customers may be rapid entrants if they can easily and rapidly begin selling to the targeted customers.

Firms that clearly possess the necessary assets to supply into the relevant market rapidly may also be rapid entrants. In markets for relatively homogeneous goods where a supplier's ability to compete depends predominantly on its costs and its capacity, and not on other factors such as experience or reputation in the relevant market, a supplier with efficient idle capacity, or readily available "swing" capacity currently used in adjacent markets that can easily and profitably be shifted to serve the relevant market, may be a rapid entrant.<sup>8</sup> However, idle capacity may be inefficient, and capacity used in adjacent markets may not be available, so a firm's possession of idle or swing capacity alone does not make that firm a rapid entrant.

### 5.2 Market Shares

The Agencies normally calculate market shares for all firms that currently produce products in the relevant market, subject to the availability of data. The Agencies also calculate market shares for other market participants if this can be done to reliably reflect their competitive significance.

Market concentration and market share data are normally based on historical evidence. However, recent or ongoing changes in market conditions may indicate that the current market share of a particular firm either understates or overstates the firm's future competitive significance. The Agencies consider reasonably predictable effects of recent or ongoing changes in market conditions when calculating and interpreting market share data. For example, if a new technology that is important to long-term competitive viability is available to other firms in the market, but is not available to a particular firm, the Agencies may conclude that that firm's historical market share

<sup>&</sup>lt;sup>8</sup> If this type of supply side substitution is nearly universal among the firms selling one or more of a group of products, the Agencies may use an aggregate description of markets for those products as a matter of convenience.

overstates its future competitive significance. The Agencies may project historical market shares into the foreseeable future when this can be done reliably.

The Agencies measure market shares based on the best available indicator of firms' future competitive significance in the relevant market. This may depend upon the type of competitive effect being considered, and on the availability of data. Typically, annual data are used, but where individual transactions are large and infrequent so annual data may be unrepresentative, the Agencies may measure market shares over a longer period of time.

In most contexts, the Agencies measure each firm's market share based on its actual or projected revenues in the relevant market. Revenues in the relevant market tend to be the best measure of attractiveness to customers, since they reflect the real-world ability of firms to surmount all of the obstacles necessary to offer products on terms and conditions that are attractive to customers. In cases where one unit of a low-priced product can substitute for one unit of a higher-priced product, unit sales may measure competitive significance better than revenues. For example, a new, much less expensive product may have great competitive significance if it substantially erodes the revenues earned by older, higher-priced products, even if it earns relatively few revenues. In cases where customers sign long-term contracts, face switching costs, or tend to re-evaluate their suppliers only occasionally, revenues earned from recently acquired customers may better reflect the competitive significance of suppliers than do total revenues.

In markets for homogeneous products, a firm's competitive significance may derive principally from its ability and incentive to rapidly expand production in the relevant market in response to a price increase or output reduction by others in that market. As a result, a firm's competitive significance may depend upon its level of readily available capacity to serve the relevant market if that capacity is efficient enough to make such expansion profitable. In such markets, capacities or reserves may better reflect the future competitive significance of suppliers than revenues, and the Agencies may calculate market shares using those measures. Market participants that are not current producers may then be assigned positive market shares, but only if a measure of their competitive significance properly comparable to that of current producers is available. When market shares are measured based on firms' readily available capacities, the Agencies do not include capacity that is committed or so profitably employed outside the relevant market, or so high-cost, that it would not likely be used to respond to a SSNIP in the relevant market.

*Example 18:* The geographic market is defined around customers in the United States. Firm X produces the relevant product outside the United States, and most of its sales are made to customers outside the United States. In most contexts, Firm X's market share will be based on its sales to U.S. customers, not its total sales or total capacity. However, if the relevant product is homogeneous, and if Firm X would significantly expand sales to U.S. customers rapidly and without incurring significant sunk costs in response to a SSNIP, the Agencies may base Firm X's market share on its readily available capacity to serve U.S. customers.

When the Agencies define markets serving targeted customers, these same principles are used to measure market shares, as they apply to those customers. In most contexts, each firm's market share is based on its actual or projected revenues from the targeted customers. However, the Agencies may instead measure market shares based on revenues from a broader group of customers if doing so would more accurately reflect the competitive significance of different suppliers in the relevant market. Revenues earned from a broader group of customers may also be used when better data are thereby available.

### 5.3 Market Concentration

Market concentration is often one useful indicator of likely competitive effects of a merger. In evaluating market concentration, the Agencies consider both the post-merger level of market concentration and the change in concentration resulting from a merger. Market shares may not fully reflect the competitive significance of firms in the market or the impact of a merger. They are used in conjunction with other evidence of competitive effects. See Sections 6 and 7.

In analyzing mergers between an incumbent and a recent or potential entrant, to the extent the Agencies use the change in concentration to evaluate competitive effects, they will do so using projected market shares. A merger between an incumbent and a potential entrant can raise significant competitive concerns. The lessening of competition resulting from such a merger is more likely to be substantial, the larger is the market share of the incumbent, the greater is the competitive significance of the potential entrant, and the greater is the competitive threat posed by this potential entrant relative to others.

The Agencies give more weight to market concentration when market shares have been stable over time, especially in the face of historical changes in relative prices or costs. If a firm has retained its market share even after its price has increased relative to those of its rivals, that firm already faces limited competitive constraints, making it less likely that its remaining rivals will replace the competition lost if one of that firm's important rivals is eliminated due to a merger. By contrast, even a highly concentrated market can be very competitive if market shares fluctuate substantially over short periods of time in response to changes in competitive offerings. However, if competition by one of the merging firms has significantly contributed to these fluctuations, perhaps because it has acted as a maverick, the Agencies will consider whether the merger will enhance market power by combining that firm with one of its significant rivals.

The Agencies may measure market concentration using the number of significant competitors in the market. This measure is most useful when there is a gap in market share between significant competitors and smaller rivals or when it is difficult to measure revenues in the relevant market. The Agencies also may consider the combined market share of the merging firms as an indicator of the extent to which others in the market may not be able readily to replace competition between the merging firms that is lost through the merger.

The Agencies often calculate the Herfindahl-Hirschman Index ("HHI") of market concentration. The HHI is calculated by summing the squares of the individual firms' market shares,<sup>9</sup> and thus gives proportionately greater weight to the larger market shares. When using the HHI, the Agencies

<sup>&</sup>lt;sup>9</sup> For example, a market consisting of four firms with market shares of thirty percent, thirty percent, twenty percent, and twenty percent has an HHI of  $2600 (30^2 + 30^2 + 20^2 + 20^2 = 2600)$ . The HHI ranges from 10,000 (in the case of a pure monopoly) to a number approaching zero (in the case of an atomistic market). Although it is desirable to include all firms in the calculation, lack of information about firms with small shares is not critical because such firms do not affect the HHI significantly.

consider both the post-merger level of the HHI and the increase in the HHI resulting from the merger. The increase in the HHI is equal to twice the product of the market shares of the merging firms.<sup>10</sup>

Based on their experience, the Agencies generally classify markets into three types:

- Unconcentrated Markets: HHI below 1500
- Moderately Concentrated Markets: HHI between 1500 and 2500
- Highly Concentrated Markets: HHI above 2500

The Agencies employ the following general standards for the relevant markets they have defined:

- *Small Change in Concentration:* Mergers involving an increase in the HHI of less than 100 points are unlikely to have adverse competitive effects and ordinarily require no further analysis.
- *Unconcentrated Markets:* Mergers resulting in unconcentrated markets are unlikely to have adverse competitive effects and ordinarily require no further analysis.
- *Moderately Concentrated Markets:* Mergers resulting in moderately concentrated markets that involve an increase in the HHI of more than 100 points potentially raise significant competitive concerns and often warrant scrutiny.
- *Highly Concentrated Markets:* Mergers resulting in highly concentrated markets that involve an increase in the HHI of between 100 points and 200 points potentially raise significant competitive concerns and often warrant scrutiny. Mergers resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power. The presumption may be rebutted by persuasive evidence showing that the merger is unlikely to enhance market power.

The purpose of these thresholds is not to provide a rigid screen to separate competitively benign mergers from anticompetitive ones, although high levels of concentration do raise concerns. Rather, they provide one way to identify some mergers unlikely to raise competitive concerns and some others for which it is particularly important to examine whether other competitive factors confirm, reinforce, or counteract the potentially harmful effects of increased concentration. The higher the post-merger HHI and the increase in the HHI, the greater are the Agencies' potential competitive concerns and the greater is the likelihood that the Agencies will request additional information to conduct their analysis.

<sup>&</sup>lt;sup>10</sup> For example, the merger of firms with shares of five percent and ten percent of the market would increase the HHI by  $100 (5 \times 10 \times 2 = 100)$ .

## 6. Unilateral Effects

The elimination of competition between two firms that results from their merger may alone constitute a substantial lessening of competition. Such unilateral effects are most apparent in a merger to monopoly in a relevant market, but are by no means limited to that case. Whether cognizable efficiencies resulting from the merger are likely to reduce or reverse adverse unilateral effects is addressed in Section 10.

Several common types of unilateral effects are discussed in this section. Section 6.1 discusses unilateral price effects in markets with differentiated products. Section 6.2 discusses unilateral effects in markets where sellers negotiate with buyers or prices are determined through auctions. Section 6.3 discusses unilateral effects relating to reductions in output or capacity in markets for relatively homogeneous products. Section 6.4 discusses unilateral effects arising from diminished innovation or reduced product variety. These effects do not exhaust the types of possible unilateral effects; for example, exclusionary unilateral effects also can arise.

A merger may result in different unilateral effects along different dimensions of competition. For example, a merger may increase prices in the short term but not raise longer-term concerns about innovation, either because rivals will provide sufficient innovation competition or because the merger will generate cognizable research and development efficiencies. See Section 10.

## 6.1 Pricing of Differentiated Products

In differentiated product industries, some products can be very close substitutes and compete strongly with each other, while other products are more distant substitutes and compete less strongly. For example, one high-end product may compete much more directly with another high-end product than with any low-end product.

A merger between firms selling differentiated products may diminish competition by enabling the merged firm to profit by unilaterally raising the price of one or both products above the pre-merger level. Some of the sales lost due to the price rise will merely be diverted to the product of the merger partner and, depending on relative margins, capturing such sales loss through merger may make the price increase profitable even though it would not have been profitable prior to the merger.

The extent of direct competition between the products sold by the merging parties is central to the evaluation of unilateral price effects. Unilateral price effects are greater, the more the buyers of products sold by one merging firm consider products sold by the other merging firm to be their next choice. The Agencies consider any reasonably available and reliable information to evaluate the extent of direct competition between the products sold by the merging firms. This includes documentary and testimonial evidence, win/loss reports and evidence from discount approval processes, customer switching patterns, and customer surveys. The types of evidence relied on often overlap substantially with the types of evidence of customer substitution relevant to the hypothetical monopolist test. See Section 4.1.1.

Substantial unilateral price elevation post-merger for a product formerly sold by one of the merging firms normally requires that a significant fraction of the customers purchasing that product view

products formerly sold by the other merging firm as their next-best choice. However, unless premerger margins between price and incremental cost are low, that significant fraction need not approach a majority. For this purpose, incremental cost is measured over the change in output that would be caused by the price change considered. A merger may produce significant unilateral effects for a given product even though many more sales are diverted to products sold by non-merging firms than to products previously sold by the merger partner.

*Example 19:* In Example 5, the merged entity controlling Products A and B would raise prices ten percent, given the product offerings and prices of other firms. In that example, one-third of the sales lost by Product A when its price alone is raised are diverted to Product B. Further analysis is required to account for repositioning, entry, and efficiencies.

In some cases, the Agencies may seek to quantify the extent of direct competition between a product sold by one merging firm and a second product sold by the other merging firm by estimating the diversion ratio from the first product to the second product. The diversion ratio is the fraction of unit sales lost by the first product due to an increase in its price that would be diverted to the second product. Diversion ratios between products sold by one merging firm and products sold by the other merging firm can be very informative for assessing unilateral price effects, with higher diversion ratios indicating a greater likelihood of such effects. Diversion ratios between products sold by merging firms and those sold by non-merging firms have at most secondary predictive value.

Adverse unilateral price effects can arise when the merger gives the merged entity an incentive to raise the price of a product previously sold by one merging firm and thereby divert sales to products previously sold by the other merging firm, boosting the profits on the latter products. Taking as given other prices and product offerings, that boost to profits is equal to the value to the merged firm of the sales diverted to those products. The value of sales diverted to a product is equal to the number of units diverted to that product multiplied by the margin between price and incremental cost on that product. In some cases, where sufficient information is available, the Agencies assess the value of diverted sales, which can serve as an indicator of the upward pricing pressure on the first product resulting from the merger. Diagnosing unilateral price effects based on the value of diverted sales need not rely on market definition or the calculation of market shares and concentration. The Agencies rely much more on the value of diverted sales than on the level of the HHI for diagnosing unilateral price effects in markets with differentiated products. If the value of diverted sales is proportionately small, significant unilateral price effects are unlikely.<sup>11</sup>

Where sufficient data are available, the Agencies may construct economic models designed to quantify the unilateral price effects resulting from the merger. These models often include independent price responses by non-merging firms. They also can incorporate merger-specific efficiencies. These merger simulation methods need not rely on market definition. The Agencies do not treat merger simulation evidence as conclusive in itself, and they place more weight on whether their merger simulations consistently predict substantial price increases than on the precise prediction of any single simulation.

<sup>&</sup>lt;sup>11</sup> For this purpose, the value of diverted sales is measured in proportion to the lost revenues attributable to the reduction in unit sales resulting from the price increase. Those lost revenues equal the reduction in the number of units sold of that product multiplied by that product's price.

A merger is unlikely to generate substantial unilateral price increases if non-merging parties offer very close substitutes for the products offered by the merging firms. In some cases, non-merging firms may be able to reposition their products to offer close substitutes for the products offered by the merging firms. Repositioning is a supply-side response that is evaluated much like entry, with consideration given to timeliness, likelihood, and sufficiency. See Section 9. The Agencies consider whether repositioning would be sufficient to deter or counteract what otherwise would be significant anticompetitive unilateral effects from a differentiated products merger.

## 6.2 Bargaining and Auctions

In many industries, especially those involving intermediate goods and services, buyers and sellers negotiate to determine prices and other terms of trade. In that process, buyers commonly negotiate with more than one seller, and may play sellers off against one another. Some highly structured forms of such competition are known as auctions. Negotiations often combine aspects of an auction with aspects of one-on-one negotiation, although pure auctions are sometimes used in government procurement and elsewhere.

A merger between two competing sellers prevents buyers from playing those sellers off against each other in negotiations. This alone can significantly enhance the ability and incentive of the merged entity to obtain a result more favorable to it, and less favorable to the buyer, than the merging firms would have offered separately absent the merger. The Agencies analyze unilateral effects of this type using similar approaches to those described in Section 6.1.

Anticompetitive unilateral effects in these settings are likely in proportion to the frequency or probability with which, prior to the merger, one of the merging sellers had been the runner-up when the other won the business. These effects also are likely to be greater, the greater advantage the runner-up merging firm has over other suppliers in meeting customers' needs. These effects also tend to be greater, the more profitable were the pre-merger winning bids. All of these factors are likely to be small if there are many equally placed bidders.

The mechanisms of these anticompetitive unilateral effects, and the indicia of their likelihood, differ somewhat according to the bargaining practices used, the auction format, and the sellers' information about one another's costs and about buyers' preferences. For example, when the merging sellers are likely to know which buyers they are best and second best placed to serve, any anticompetitive unilateral effects are apt to be targeted at those buyers; when sellers are less well informed, such effects are more apt to be spread over a broader class of buyers.

## 6.3 Capacity and Output for Homogeneous Products

In markets involving relatively undifferentiated products, the Agencies may evaluate whether the merged firm will find it profitable unilaterally to suppress output and elevate the market price. A firm may leave capacity idle, refrain from building or obtaining capacity that would have been obtained absent the merger, or eliminate pre-existing production capabilities. A firm may also divert the use of capacity away from one relevant market and into another so as to raise the price in the former market. The competitive analyses of these alternative modes of output suppression may differ.

A unilateral output suppression strategy is more likely to be profitable when (1) the merged firm's market share is relatively high; (2) the share of the merged firm's output already committed for sale at prices unaffected by the output suppression is relatively low; (3) the margin on the suppressed output is relatively low; (4) the supply responses of rivals are relatively small; and (5) the market elasticity of demand is relatively low.

A merger may provide the merged firm a larger base of sales on which to benefit from the resulting price rise, or it may eliminate a competitor that otherwise could have expanded its output in response to the price rise.

*Example 20:* Firms A and B both produce an industrial commodity and propose to merge. The demand for this commodity is insensitive to price. Firm A is the market leader. Firm B produces substantial output, but its operating margins are low because it operates high-cost plants. The other suppliers are operating very near capacity. The merged firm has an incentive to reduce output at the high-cost plants, perhaps shutting down some of that capacity, thus driving up the price it receives on the remainder of its output. The merger harms customers, notwithstanding that the merged firm shifts some output from high-cost plants to low-cost plants.

In some cases, a merger between a firm with a substantial share of the sales in the market and a firm with significant excess capacity to serve that market can make an output suppression strategy profitable.<sup>12</sup> This can occur even if the firm with the excess capacity has a relatively small share of sales, if that firm's ability to expand, and thus keep price from rising, has been making an output suppression strategy unprofitable for the firm with the larger market share.

### 6.4 Innovation and Product Variety

Competition often spurs firms to innovate. The Agencies may consider whether a merger is likely to diminish innovation competition by encouraging the merged firm to curtail its innovative efforts below the level that would prevail in the absence of the merger. That curtailment of innovation could take the form of reduced incentive to continue with an existing product-development effort or reduced incentive to initiate development of new products.

The first of these effects is most likely to occur if at least one of the merging firms is engaging in efforts to introduce new products that would capture substantial revenues from the other merging firm. The second, longer-run effect is most likely to occur if at least one of the merging firms has capabilities that are likely to lead it to develop new products in the future that would capture substantial revenues from the other merging firm. The Agencies therefore also consider whether a merger will diminish innovation competition by combining two of a very small number of firms with the strongest capabilities to successfully innovate in a specific direction.

The Agencies evaluate the extent to which successful innovation by one merging firm is likely to take sales from the other, and the extent to which post-merger incentives for future innovation will be lower than those that would prevail in the absence of the merger. The Agencies also consider whether the merger is likely to enable innovation that would not otherwise take place, by bringing together

<sup>&</sup>lt;sup>12</sup> Such a merger also can cause adverse coordinated effects, especially if the acquired firm with excess capacity was disrupting effective coordination.

complementary capabilities that cannot be otherwise combined or for some other merger-specific reason. See Section 10.

The Agencies also consider whether a merger is likely to give the merged firm an incentive to cease offering one of the relevant products sold by the merging parties. Reductions in variety following a merger may or may not be anticompetitive. Mergers can lead to the efficient consolidation of products when variety offers little in value to customers. In other cases, a merger may increase variety by encouraging the merged firm to reposition its products to be more differentiated from one another.

If the merged firm would withdraw a product that a significant number of customers strongly prefer to those products that would remain available, this can constitute a harm to customers over and above any effects on the price or quality of any given product. If there is evidence of such an effect, the Agencies may inquire whether the reduction in variety is largely due to a loss of competitive incentives attributable to the merger. An anticompetitive incentive to eliminate a product as a result of the merger is greater and more likely, the larger is the share of profits from that product coming at the expense of profits from products sold by the merger partner. Where a merger substantially reduces competition by bringing two close substitute products under common ownership, and one of those products is eliminated, the merger will often also lead to a price increase on the remaining product, but that is not a necessary condition for anticompetitive effect.

*Example 21:* Firm A sells a high-end product at a premium price. Firm B sells a mid-range product at a lower price, serving customers who are more price sensitive. Several other firms have low-end products. Firms A and B together have a large share of the relevant market. Firm A proposes to acquire Firm B and discontinue Firm B's product. Firm A expects to retain most of Firm B's customers. Firm A may not find it profitable to raise the price of its high-end product after the merger, because doing so would reduce its ability to retain Firm B's more price-sensitive customers. The Agencies may conclude that the withdrawal of Firm B's product results from a loss of competition and materially harms customers.

## 7. Coordinated Effects

A merger may diminish competition by enabling or encouraging post-merger coordinated interaction among firms in the relevant market that harms customers. Coordinated interaction involves conduct by multiple firms that is profitable for each of them only as a result of the accommodating reactions of the others. These reactions can blunt a firm's incentive to offer customers better deals by undercutting the extent to which such a move would win business away from rivals. They also can enhance a firm's incentive to raise prices, by assuaging the fear that such a move would lose customers to rivals.

Coordinated interaction includes a range of conduct. Coordinated interaction can involve the explicit negotiation of a common understanding of how firms will compete or refrain from competing. Such conduct typically would itself violate the antitrust laws. Coordinated interaction also can involve a similar common understanding that is not explicitly negotiated but would be enforced by the detection and punishment of deviations that would undermine the coordinated interaction. Coordinated interaction alternatively can involve parallel accommodating conduct not pursuant to a prior understanding. Parallel accommodating conduct includes situations in which each rival's response to competitive moves made by others is individually rational, and not motivated by

retaliation or deterrence nor intended to sustain an agreed-upon market outcome, but nevertheless emboldens price increases and weakens competitive incentives to reduce prices or offer customers better terms. Coordinated interaction includes conduct not otherwise condemned by the antitrust laws.

The ability of rival firms to engage in coordinated conduct depends on the strength and predictability of rivals' responses to a price change or other competitive initiative. Under some circumstances, a merger can result in market concentration sufficient to strengthen such responses or enable multiple firms in the market to predict them more confidently, thereby affecting the competitive incentives of multiple firms in the market, not just the merged firm.

## 7.1 Impact of Merger on Coordinated Interaction

The Agencies examine whether a merger is likely to change the manner in which market participants interact, inducing substantially more coordinated interaction. The Agencies seek to identify how a merger might significantly weaken competitive incentives through an increase in the strength, extent, or likelihood of coordinated conduct. There are, however, numerous forms of coordination, and the risk that a merger will induce adverse coordinated effects may not be susceptible to quantification or detailed proof. Therefore, the Agencies evaluate the risk of coordinated effects using measures of market concentration (see Section 5) in conjunction with an assessment of whether a market is vulnerable to coordinated conduct. See Section 7.2. The analysis in Section 7.2 applies to moderately and highly concentrated markets, as unconcentrated markets are unlikely to be vulnerable to coordinated conduct.

Pursuant to the Clayton Act's incipiency standard, the Agencies may challenge mergers that in their judgment pose a real danger of harm through coordinated effects, even without specific evidence showing precisely how the coordination likely would take place. The Agencies are likely to challenge a merger if the following three conditions are all met: (1) the merger would significantly increase concentration and lead to a moderately or highly concentrated market; (2) that market shows signs of vulnerability to coordinated conduct (see Section 7.2); and (3) the Agencies have a credible basis on which to conclude that the merger may enhance that vulnerability. An acquisition eliminating a maverick firm (see Section 2.1.5) in a market vulnerable to coordinated conduct is likely to cause adverse coordinated effects.

## 7.2 Evidence a Market is Vulnerable to Coordinated Conduct

The Agencies presume that market conditions are conducive to coordinated interaction if firms representing a substantial share in the relevant market appear to have previously engaged in express collusion affecting the relevant market, unless competitive conditions in the market have since changed significantly. Previous express collusion in another geographic market will have the same weight if the salient characteristics of that other market at the time of the collusion are comparable to those in the relevant market. Failed previous attempts at collusion in the relevant market suggest that successful collusion was difficult pre-merger but not so difficult as to deter attempts, and a merger may tend to make success more likely. Previous collusion or attempted collusion in another product market may also be given substantial weight if the salient characteristics of that other market at the time of the collusion are closely comparable to those in the relevant market at the

A market typically is more vulnerable to coordinated conduct if each competitively important firm's significant competitive initiatives can be promptly and confidently observed by that firm's rivals. This is more likely to be the case if the terms offered to customers are relatively transparent. Price transparency can be greater for relatively homogeneous products. Even if terms of dealing are not transparent, transparency regarding the identities of the firms serving particular customers can give rise to coordination, e.g., through customer or territorial allocation. Regular monitoring by suppliers of one another's prices or customers can indicate that the terms offered to customers are relatively transparent.

A market typically is more vulnerable to coordinated conduct if a firm's prospective competitive reward from attracting customers away from its rivals will be significantly diminished by likely responses of those rivals. This is more likely to be the case, the stronger and faster are the responses the firm anticipates from its rivals. The firm is more likely to anticipate strong responses if there are few significant competitors, if products in the relevant market are relatively homogeneous, if customers find it relatively easy to switch between suppliers, or if suppliers use meeting-competition clauses.

A firm is more likely to be deterred from making competitive initiatives by whatever responses occur if sales are small and frequent rather than via occasional large and long-term contracts or if relatively few customers will switch to it before rivals are able to respond. A firm is less likely to be deterred by whatever responses occur if the firm has little stake in the status quo. For example, a firm with a small market share that can quickly and dramatically expand, constrained neither by limits on production nor by customer reluctance to switch providers or to entrust business to a historically small provider, is unlikely to be deterred. Firms are also less likely to be deterred by whatever responses occur if competition in the relevant market is marked by leapfrogging technological innovation, so that responses by competitors leave the gains from successful innovation largely intact.

A market is more apt to be vulnerable to coordinated conduct if the firm initiating a price increase will lose relatively few customers after rivals respond to the increase. Similarly, a market is more apt to be vulnerable to coordinated conduct if a firm that first offers a lower price or improved product to customers will retain relatively few customers thus attracted away from its rivals after those rivals respond.

The Agencies regard coordinated interaction as more likely, the more the participants stand to gain from successful coordination. Coordination generally is more profitable, the lower is the market elasticity of demand.

Coordinated conduct can harm customers even if not all firms in the relevant market engage in the coordination, but significant harm normally is likely only if a substantial part of the market is subject to such conduct. The prospect of harm depends on the collective market power, in the relevant market, of firms whose incentives to compete are substantially weakened by coordinated conduct. This collective market power is greater, the lower is the market elasticity of demand. This collective market power is diminished by the presence of other market participants with small market shares and little stake in the outcome resulting from the coordinated conduct, if these firms can rapidly expand their sales in the relevant market.

Buyer characteristics and the nature of the procurement process can affect coordination. For example, sellers may have the incentive to bid aggressively for a large contract even if they expect strong responses by rivals. This is especially the case for sellers with small market shares, if they can realistically win such large contracts. In some cases, a large buyer may be able to strategically undermine coordinated conduct, at least as it pertains to that buyer's needs, by choosing to put up for bid a few large contracts rather than many smaller ones, and by making its procurement decisions opaque to suppliers.

## 8. Powerful Buyers

Powerful buyers are often able to negotiate favorable terms with their suppliers. Such terms may reflect the lower costs of serving these buyers, but they also can reflect price discrimination in their favor.

The Agencies consider the possibility that powerful buyers may constrain the ability of the merging parties to raise prices. This can occur, for example, if powerful buyers have the ability and incentive to vertically integrate upstream or sponsor entry, or if the conduct or presence of large buyers undermines coordinated effects. However, the Agencies do not presume that the presence of powerful buyers alone forestalls adverse competitive effects flowing from the merger. Even buyers that can negotiate favorable terms may be harmed by an increase in market power. The Agencies examine the choices available to powerful buyers and how those choices likely would change due to the merger. Normally, a merger that eliminates a supplier whose presence contributed significantly to a buyer's negotiating leverage will harm that buyer.

*Example 22:* Customer C has been able to negotiate lower pre-merger prices than other customers by threatening to shift its large volume of purchases from one merging firm to the other. No other suppliers are as well placed to meet Customer C's needs for volume and reliability. The merger is likely to harm Customer C. In this situation, the Agencies could identify a price discrimination market consisting of Customer C and similarly placed customers. The merger threatens to end previous price discrimination in their favor.

Furthermore, even if some powerful buyers could protect themselves, the Agencies also consider whether market power can be exercised against other buyers.

*Example 23:* In Example 22, if Customer C instead obtained the lower pre-merger prices based on a credible threat to supply its own needs, or to sponsor new entry, Customer C might not be harmed. However, even in this case, other customers may still be harmed.

## 9. Entry

The analysis of competitive effects in Sections 6 and 7 focuses on current participants in the relevant market. That analysis may also include some forms of entry. Firms that would rapidly and easily enter the market in response to a SSNIP are market participants and may be assigned market shares. See Sections 5.1 and 5.2. Firms that have, prior to the merger, committed to entering the market also will normally be treated as market participants. See Section 5.1. This section concerns entry or adjustments to pre-existing entry plans that are induced by the merger.

As part of their full assessment of competitive effects, the Agencies consider entry into the relevant market. The prospect of entry into the relevant market will alleviate concerns about adverse competitive effects only if such entry will deter or counteract any competitive effects of concern so the merger will not substantially harm customers.

The Agencies consider the actual history of entry into the relevant market and give substantial weight to this evidence. Lack of successful and effective entry in the face of non-transitory increases in the margins earned on products in the relevant market tends to suggest that successful entry is slow or difficult. Market values of incumbent firms greatly exceeding the replacement costs of their tangible assets may indicate that these firms have valuable intangible assets, which may be difficult or time consuming for an entrant to replicate.

A merger is not likely to enhance market power if entry into the market is so easy that the merged firm and its remaining rivals in the market, either unilaterally or collectively, could not profitably raise price or otherwise reduce competition compared to the level that would prevail in the absence of the merger. Entry is that easy if entry would be timely, likely, and sufficient in its magnitude, character, and scope to deter or counteract the competitive effects of concern.

The Agencies examine the timeliness, likelihood, and sufficiency of the entry efforts an entrant might practically employ. An entry effort is defined by the actions the firm must undertake to produce and sell in the market. Various elements of the entry effort will be considered. These elements can include: planning, design, and management; permitting, licensing, or other approvals; construction, debugging, and operation of production facilities; and promotion (including necessary introductory discounts), marketing, distribution, and satisfaction of customer testing and qualification requirements. Recent examples of entry, whether successful or unsuccessful, generally provide the starting point for identifying the elements of practical entry efforts. They also can be informative regarding the scale necessary for an entrant to be successful, the presence or absence of entry barriers, the factors that influence the timing of entry, the costs and risk associated with entry, and the sales opportunities realistically available to entrants.

If the assets necessary for an effective and profitable entry effort are widely available, the Agencies will not necessarily attempt to identify which firms might enter. Where an identifiable set of firms appears to have necessary assets that others lack, or to have particularly strong incentives to enter, the Agencies focus their entry analysis on those firms. Firms operating in adjacent or complementary markets, or large customers themselves, may be best placed to enter. However, the Agencies will not presume that a powerful firm in an adjacent market or a large customer will enter the relevant market unless there is reliable evidence supporting that conclusion.

In assessing whether entry will be timely, likely, and sufficient, the Agencies recognize that precise and detailed information may be difficult or impossible to obtain. The Agencies consider reasonably available and reliable evidence bearing on whether entry will satisfy the conditions of timeliness, likelihood, and sufficiency.

## 9.1 Timeliness

In order to deter the competitive effects of concern, entry must be rapid enough to make unprofitable overall the actions causing those effects and thus leading to entry, even though those actions would be profitable until entry takes effect.

Even if the prospect of entry does not deter the competitive effects of concern, post-merger entry may counteract them. This requires that the impact of entrants in the relevant market be rapid enough that customers are not significantly harmed by the merger, despite any anticompetitive harm that occurs prior to the entry.

The Agencies will not presume that an entrant can have a significant impact on prices before that entrant is ready to provide the relevant product to customers unless there is reliable evidence that anticipated future entry would have such an effect on prices.

## 9.2 Likelihood

Entry is likely if it would be profitable, accounting for the assets, capabilities, and capital needed and the risks involved, including the need for the entrant to incur costs that would not be recovered if the entrant later exits. Profitability depends upon (a) the output level the entrant is likely to obtain, accounting for the obstacles facing new entrants; (b) the price the entrant would likely obtain in the post-merger market, accounting for the impact of that entry itself on prices; and (c) the cost per unit the entrant would likely incur, which may depend upon the scale at which the entrant would operate.

### 9.3 Sufficiency

Even where timely and likely, entry may not be sufficient to deter or counteract the competitive effects of concern. For example, in a differentiated product industry, entry may be insufficient because the products offered by entrants are not close enough substitutes to the products offered by the merged firm to render a price increase by the merged firm unprofitable. Entry may also be insufficient due to constraints that limit entrants' competitive effectiveness, such as limitations on the capabilities of the firms best placed to enter or reputational barriers to rapid expansion by new entrants. Entry by a single firm that will replicate at least the scale and strength of one of the merging firms is sufficient. Entry by one or more firms operating at a smaller scale may be sufficient if such firms are not at a significant competitive disadvantage.

## 10. Efficiencies

Competition usually spurs firms to achieve efficiencies internally. Nevertheless, a primary benefit of mergers to the economy is their potential to generate significant efficiencies and thus enhance the merged firm's ability and incentive to compete, which may result in lower prices, improved quality, enhanced service, or new products. For example, merger-generated efficiencies may enhance competition by permitting two ineffective competitors to form a more effective competitor, e.g., by combining complementary assets. In a unilateral effects context, incremental cost reductions may reduce or reverse any increases in the merged firm's incentive to elevate price. Efficiencies also may lead to new or improved products, even if they do not immediately and directly affect price. In a

coordinated effects context, incremental cost reductions may make coordination less likely or effective by enhancing the incentive of a maverick to lower price or by creating a new maverick firm. Even when efficiencies generated through a merger enhance a firm's ability to compete, however, a merger may have other effects that may lessen competition and make the merger anticompetitive.

The Agencies credit only those efficiencies likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of either the proposed merger or another means having comparable anticompetitive effects. These are termed merger-specific efficiencies.<sup>13</sup> Only alternatives that are practical in the business situation faced by the merging firms are considered in making this determination. The Agencies do not insist upon a less restrictive alternative that is merely theoretical.

Efficiencies are difficult to verify and quantify, in part because much of the information relating to efficiencies is uniquely in the possession of the merging firms. Moreover, efficiencies projected reasonably and in good faith by the merging firms may not be realized. Therefore, it is incumbent upon the merging firms to substantiate efficiency claims so that the Agencies can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), how each would enhance the merged firm's ability and incentive to compete, and why each would be merger-specific.

Efficiency claims will not be considered if they are vague, speculative, or otherwise cannot be verified by reasonable means. Projections of efficiencies may be viewed with skepticism, particularly when generated outside of the usual business planning process. By contrast, efficiency claims substantiated by analogous past experience are those most likely to be credited.

Cognizable efficiencies are merger-specific efficiencies that have been verified and do not arise from anticompetitive reductions in output or service. Cognizable efficiencies are assessed net of costs produced by the merger or incurred in achieving those efficiencies.

The Agencies will not challenge a merger if cognizable efficiencies are of a character and magnitude such that the merger is not likely to be anticompetitive in any relevant market.<sup>14</sup> To make the requisite determination, the Agencies consider whether cognizable efficiencies likely would be sufficient to reverse the merger's potential to harm customers in the relevant market, e.g., by preventing price

<sup>&</sup>lt;sup>13</sup> The Agencies will not deem efficiencies to be merger-specific if they could be attained by practical alternatives that mitigate competitive concerns, such as divestiture or licensing. If a merger affects not whether but only when an efficiency would be achieved, only the timing advantage is a merger-specific efficiency.

<sup>&</sup>lt;sup>14</sup> The Agencies normally assess competition in each relevant market affected by a merger independently and normally will challenge the merger if it is likely to be anticompetitive in any relevant market. In some cases, however, the Agencies in their prosecutorial discretion will consider efficiencies not strictly in the relevant market, but so inextricably linked with it that a partial divestiture or other remedy could not feasibly eliminate the anticompetitive effect in the relevant market without sacrificing the efficiencies in the other market(s). Inextricably linked efficiencies are most likely to make a difference when they are great and the likely anticompetitive effect in the relevant market(s) is small so the merger is likely to benefit customers overall.

increases in that market.<sup>15</sup> In conducting this analysis, the Agencies will not simply compare the magnitude of the cognizable efficiencies with the magnitude of the likely harm to competition absent the efficiencies. The greater the potential adverse competitive effect of a merger, the greater must be the cognizable efficiencies, and the more they must be passed through to customers, for the Agencies to conclude that the merger will not have an anticompetitive effect in the relevant market. When the potential adverse competitive effect of a merger is likely to be particularly substantial, extraordinarily great cognizable efficiencies would be necessary to prevent the merger from being anticompetitive. In adhering to this approach, the Agencies are mindful that the antitrust laws give competition, not internal operational efficiency, primacy in protecting customers.

In the Agencies' experience, efficiencies are most likely to make a difference in merger analysis when the likely adverse competitive effects, absent the efficiencies, are not great. Efficiencies almost never justify a merger to monopoly or near-monopoly. Just as adverse competitive effects can arise along multiple dimensions of conduct, such as pricing and new product development, so too can efficiencies operate along multiple dimensions. Similarly, purported efficiency claims based on lower prices can be undermined if they rest on reductions in product quality or variety that customers value.

The Agencies have found that certain types of efficiencies are more likely to be cognizable and substantial than others. For example, efficiencies resulting from shifting production among facilities formerly owned separately, which enable the merging firms to reduce the incremental cost of production, are more likely to be susceptible to verification and are less likely to result from anticompetitive reductions in output. Other efficiencies, such as those relating to research and development, are potentially substantial but are generally less susceptible to verification and may be the result of anticompetitive output reductions. Yet others, such as those relating to procurement, management, or capital cost, are less likely to be merger-specific or substantial, or may not be cognizable for other reasons.

When evaluating the effects of a merger on innovation, the Agencies consider the ability of the merged firm to conduct research or development more effectively. Such efficiencies may spur innovation but not affect short-term pricing. The Agencies also consider the ability of the merged firm to appropriate a greater fraction of the benefits resulting from its innovations. Licensing and intellectual property conditions may be important to this enquiry, as they affect the ability of a firm to appropriate the benefits of its innovation. Research and development cost savings may be substantial and yet not be cognizable efficiencies because they are difficult to verify or result from anticompetitive reductions in innovative activities.

<sup>&</sup>lt;sup>15</sup> The Agencies normally give the most weight to the results of this analysis over the short term. The Agencies also may consider the effects of cognizable efficiencies with no short-term, direct effect on prices in the relevant market. Delayed benefits from efficiencies (due to delay in the achievement of, or the realization of customer benefits from, the efficiencies) will be given less weight because they are less proximate and more difficult to predict. Efficiencies relating to costs that are fixed in the short term are unlikely to benefit customers in the short term, but can benefit customers in the longer run, e.g., if they make new product introduction less expensive.

## 11. Failure and Exiting Assets

Notwithstanding the analysis above, a merger is not likely to enhance market power if imminent failure, as defined below, of one of the merging firms would cause the assets of that firm to exit the relevant market. This is an extreme instance of the more general circumstance in which the competitive significance of one of the merging firms is declining: the projected market share and significance of the exiting firm is zero. If the relevant assets would otherwise exit the market, customers are not worse off after the merger than they would have been had the merger been enjoined.

The Agencies do not normally credit claims that the assets of the failing firm would exit the relevant market unless all of the following circumstances are met: (1) the allegedly failing firm would be unable to meet its financial obligations in the near future; (2) it would not be able to reorganize successfully under Chapter 11 of the Bankruptcy Act; and (3) it has made unsuccessful good-faith efforts to elicit reasonable alternative offers that would keep its tangible and intangible assets in the relevant market and pose a less severe danger to competition than does the proposed merger.<sup>16</sup>

Similarly, a merger is unlikely to cause competitive harm if the risks to competition arise from the acquisition of a failing division. The Agencies do not normally credit claims that the assets of a division would exit the relevant market in the near future unless both of the following conditions are met: (1) applying cost allocation rules that reflect true economic costs, the division has a persistently negative cash flow on an operating basis, and such negative cash flow is not economically justified for the firm by benefits such as added sales in complementary markets or enhanced customer goodwill;<sup>17</sup> and (2) the owner of the failing division has made unsuccessful good-faith efforts to elicit reasonable alternative offers that would keep its tangible and intangible assets in the relevant market and pose a less severe danger to competition than does the proposed acquisition.

## 12. Mergers of Competing Buyers

Mergers of competing buyers can enhance market power on the buying side of the market, just as mergers of competing sellers can enhance market power on the selling side of the market. Buyer market power is sometimes called "monopsony power."

To evaluate whether a merger is likely to enhance market power on the buying side of the market, the Agencies employ essentially the framework described above for evaluating whether a merger is likely to enhance market power on the selling side of the market. In defining relevant markets, the Agencies

<sup>&</sup>lt;sup>16</sup> Any offer to purchase the assets of the failing firm for a price above the liquidation value of those assets will be regarded as a reasonable alternative offer. Liquidation value is the highest value the assets could command for use outside the relevant market.

<sup>&</sup>lt;sup>17</sup> Because the parent firm can allocate costs, revenues, and intra-company transactions among itself and its subsidiaries and divisions, the Agencies require evidence on these two points that is not solely based on management plans that could have been prepared for the purpose of demonstrating negative cash flow or the prospect of exit from the relevant market.

focus on the alternatives available to sellers in the face of a decrease in the price paid by a hypothetical monopsonist.

Market power on the buying side of the market is not a significant concern if suppliers have numerous attractive outlets for their goods or services. However, when that is not the case, the Agencies may conclude that the merger of competing buyers is likely to lessen competition in a manner harmful to sellers.

The Agencies distinguish between effects on sellers arising from a lessening of competition and effects arising in other ways. A merger that does not enhance market power on the buying side of the market can nevertheless lead to a reduction in prices paid by the merged firm, for example, by reducing transactions costs or allowing the merged firm to take advantage of volume-based discounts. Reduction in prices paid by the merging firms not arising from the enhancement of market power can be significant in the evaluation of efficiencies from a merger, as discussed in Section 10.

The Agencies do not view a short-run reduction in the quantity purchased as the only, or best, indicator of whether a merger enhances buyer market power. Nor do the Agencies evaluate the competitive effects of mergers between competing buyers strictly, or even primarily, on the basis of effects in the downstream markets in which the merging firms sell.

*Example 24:* Merging Firms A and B are the only two buyers in the relevant geographic market for an agricultural product. Their merger will enhance buyer power and depress the price paid to farmers for this product, causing a transfer of wealth from farmers to the merged firm and inefficiently reducing supply. These effects can arise even if the merger will not lead to any increase in the price charged by the merged firm for its output.

## 13. Partial Acquisitions

In most horizontal mergers, two competitors come under common ownership and control, completely and permanently eliminating competition between them. This elimination of competition is a basic element of merger analysis. However, the statutory provisions referenced in Section 1 also apply to one firm's partial acquisition of a competitor. The Agencies therefore also review acquisitions of minority positions involving competing firms, even if such minority positions do not necessarily or completely eliminate competition between the parties to the transaction.

When the Agencies determine that a partial acquisition results in effective control of the target firm, or involves substantially all of the relevant assets of the target firm, they analyze the transaction much as they do a merger. Partial acquisitions that do not result in effective control may nevertheless present significant competitive concerns and may require a somewhat distinct analysis from that applied to full mergers or to acquisitions involving effective control. The details of the post-acquisition relationship between the parties, and how those details are likely to affect competition, can be important. While the Agencies will consider any way in which a partial acquisition may affect competition, they generally focus on three principal effects.

First, a partial acquisition can lessen competition by giving the acquiring firm the ability to influence the competitive conduct of the target firm. A voting interest in the target firm or specific governance rights, such as the right to appoint members to the board of directors, can permit such influence. Such influence can lessen competition because the acquiring firm can use its influence to induce the target firm to compete less aggressively or to coordinate its conduct with that of the acquiring firm.

Second, a partial acquisition can lessen competition by reducing the incentive of the acquiring firm to compete. Acquiring a minority position in a rival might significantly blunt the incentive of the acquiring firm to compete aggressively because it shares in the losses thereby inflicted on that rival. This reduction in the incentive of the acquiring firm to compete arises even if cannot influence the conduct of the target firm. As compared with the unilateral competitive effect of a full merger, this effect is likely attenuated by the fact that the ownership is only partial.

Third, a partial acquisition can lessen competition by giving the acquiring firm access to non-public, competitively sensitive information from the target firm. Even absent any ability to influence the conduct of the target firm, access to competitively sensitive information can lead to adverse unilateral or coordinated effects. For example, it can enhance the ability of the two firms to coordinate their behavior, and make other accommodating responses faster and more targeted. The risk of coordinated effects is greater if the transaction also facilitates the flow of competitively sensitive information from the acquiring firm to the target firm.

Partial acquisitions, like mergers, vary greatly in their potential for anticompetitive effects. Accordingly, the specific facts of each case must be examined to assess the likelihood of harm to competition. While partial acquisitions usually do not enable many of the types of efficiencies associated with mergers, the Agencies consider whether a partial acquisition is likely to create cognizable efficiencies.

#### STATEMENT OF CHAIRMAN LEIBOWITZ ON THE RELEASE OF THE 2010 HORIZONTAL MERGER GUIDELINES Project No. P092900 August 19, 2010

The process for modifying the Horizontal Merger Guidelines has concluded more successfully than I could have predicted at the outset. The result is a clear and systematic description of the techniques the FTC and the Antitrust Division of the Department of Justice use to review mergers, and a document that has received bi-partisan and unanimous support from the Commission. Because of the hard work of all involved at both agencies, private parties and judges will be better equipped to understand how the agencies evaluate deals. That improvement in clarity and predictability will benefit everyone.

In revising the Guidelines, the Commission jointly with the Antitrust Division solicited public comments on a number of questions, and held a series of public workshops around the country. Fifty-one parties filed comments in response to those questions, and the agencies incorporated the input they received through those responses and workshops into the draft of the Guidelines that the Commission put out for public comment in April. The Commission received 31 public comments on that draft from a wide variety of sources, including lawyers, economists, corporations, trade associations, and public interest groups. Those comments played a critical role in staff's compilation of the final Guidelines we release today.

The Guidelines have been improved through this process in ways – large and small – that are too numerous to mention. But several major advances stand out: first, the Guidelines emphasize the competitive effects of a deal over the more rigid, formulaic approach imposed by some interpretations of the 1992 Guidelines. Second, for the first time the Guidelines provide a clear description, and many examples, of the range of evidence the agencies consider when evaluating the competitive effects of a transaction. Third, the Guidelines explain in more detail the role of market-concentration measures and revise the concentration thresholds from which the agencies will draw inferences about the likely effects of a merger on market power. Finally, the new Guidelines contain revised discussions of several factors that may be important in analyzing a merger, among them innovation and product variety, coordinated effects, price discrimination, and market entry.

With these and other changes, the new Guidelines provide a clearer and more accurate explanation to merging parties, courts, and antitrust practitioners of how the agencies review transactions. We thank everyone who participated in this process.

#### STATEMENT OF COMMISSIONER J. THOMAS ROSCH ON THE RELEASE OF THE 2010 HORIZONTAL MERGER GUIDELINES

#### Project No. P092900

#### August 19, 2010

It would be wrong not to acknowledge that this project makes at least one monumental contribution to the guidance that the Agencies are providing to the business community, practitioners, and the courts. The 1992 Guidelines treated evidence of competitive effects as relevant to merger analysis. However, those Guidelines considered market structure and shares first and considered the competitive effects of a merger only after that. That created the misimpression that proof of market structure and shares are "gating items," without which competitive effects cannot be considered. These Guidelines properly consider competitive effects first, and market definition second, thereby making clear that while market definition is important to assessing competitive effects and that the market must be defined at some point in the process, ultimately merger analysis must rest on the competitive effects of a transaction. Additionally, these Guidelines make a substantial contribution by listing at the outset a variety of empirical evidence that may illuminate those competitive effects.

At the same time, it would be wrong not to acknowledge that these Guidelines are still flawed both as a description of how the staff (at the Commission at least) conducts ex ante merger review and what the Agencies should tell courts about merger analysis. Things have changed substantially since the 1992 Guidelines were issued twenty years ago. First, the Commission is increasingly challenging mergers in preliminary injunction and administrative (Part 3) proceedings. See Federal Trade Commission, The FTC in 2010, at 2 (Apr. 2010) (identifying merger enforcement rates); Federal Trade Commission & U.S. Department of Justice, Hart-Scott-Rodino Annual Report Fiscal Year 2008, at Appendix A (identifying the number of reported transactions and second requests issued). Thus, the staff's ex ante merger reviews are and must be tethered to the evidence that it plans to present and defend in those litigation proceedings. Second, economic theories embedded in the 1992 Guidelines emphasized price effects almost exclusively. Increasingly, the Agencies and courts have considered nonprice effects, like effects on quality, variety, and innovation, to be no less important. Third, for a variety of reasons, many, if not most, courts have relied on empirical evidence instead of economic evidence, and have considered economic evidence as corroborative of that empirical evidence, if they have considered it at all. See, e.g., FTC v. Staples, Inc., 970 F. Supp. 1066 (D.D.C. 1997); FTC v. CCC Holdings Inc., 605 F. Supp. 2d 26 (D.D.C. 2009). As previously discussed, that in turn has led the staff reviewing mergers ex ante to devote more attention to the empirical evidence that can be presented and defended at trial.

The process used in this project virtually ensured that the Merger Guidelines resulting from it would not fully reflect these substantial changes. I had hoped that this would be an instance in which the Commission would lead, not be led by, the staff. Lamentably, that did not happen.

More specifically, the perspectives of all stakeholders were not considered equally. First, of the six architects of the project, three were economists trained and steeped in price theory. To

be sure, some of the Commission attorneys responsible for reviewing mergers ex ante and/or explaining to the Commission how they planned to present and defend their challenges in court or in Part 3 were consulted in connection with the project. But the three economists initiated and largely managed this project. Second, there was indeed a series of workshops held around the country, and a number of comments were submitted respecting these Guidelines. But the participants in the workshops were mostly members of the defense bar, academics, and other kindred souls, and the comments apparently given the most serious attention by the project's architects (and incorporated in these Guidelines) largely reflected those same perspectives. Third, long before these Guidelines were finalized, representations were made to the ABA Antitrust Section about the changes in the 1992 Guidelines that were likely to occur. Indeed at least one private meeting was held with the Section's leadership regarding their desire for changes in the April 2010 draft of the Guidelines.

This process inevitably led to overemphasis on economic formulae and models based on price theory. For example, Sections 4.1.1 and 4.1.2 retain the SSNIP test, an economic test which posits that a small but significant profitable price increase over "benchmark prices" may be used to define a relevant market's structure. Section 5.3 builds on the markets defined by the SSNIP test and provides what amount to "safe harbors" for mergers that result in certain levels of market concentration.

The architects of the project included colleagues who co-authored papers and articles proposing economic models relying largely on margins (prices minus incremental costs) to determine whether a merger was likely to result in coordinated or unilateral anticompetitive effects. As a result, many of the economic theories in the revised Guidelines are based wholly or partially on margins. For example, the April 20, 2010 draft of Section of 2.2.1 treated margins as a species of empirical evidence and asserted that "if a firm sets price well above marginal cost, that normally indicates either that the firm is coordinating with its rivals or that the firm believes its customers are not highly sensitive to price." The final version adds that in the absence of coordinated behavior, the presence of high margins is "not in itself of antitrust concern." But that should fool no one: that a sinister inference is intended to be drawn from this provision is unmistakable not only because the prior version omitted any benign explanation for high margins, but because the alternative-i.e., the existence of coordinated interaction-is unambiguously pernicious. To be sure, footnotes 3 and 6 acknowledge that "high margins are not in themselves of antitrust concern" and identify several benign factors explaining why margins may be high. However, the acknowledgement is contained only in footnotes, and the benign factors noted are nowhere mentioned in the text. If there were any doubt about the inferences to be drawn from high margins, those doubts are dispelled by Section 4.1.3, which opines that "[u]nless the firms are engaging in coordinated interaction . . ., high pre-merger margins normally indicate that each firm's product individually faces demand that is not highly sensitive to price."

Section 4.1.3 goes on to discuss the role of margins in a critical loss analysis, saying that "[h]igher pre-merger margins thus indicate a smaller predicted loss as well as a smaller critical loss. The higher the pre-merger margin, the smaller the recapture percentage necessary for the candidate market to satisfy the hypothetical monopolist test." Indeed, both Section 4.1.3, blessing for the first time the use of critical loss analysis in dealing with market definition, and Section 6.1, dealing with the likelihood of unilateral effects in differentiated product mergers,

incorporate the concepts, if not the exact models, that two of the architects of the project have proposed in economic papers and articles in order to determine whether such effects were likely.

In contrast to heavy reliance on prices and margins (as described above, which are based in large measure on prices), the new Guidelines say comparatively little about non-price competitive effects, such as how a transaction affects quality, service, innovation, and product variety. To be sure, the Guidelines note in the introduction that "[e]nhanced market power can also be manifested in non-price terms and conditions" and contain a new section on innovation and product variety (Section 6.4). However, this same section asserts that "[m]any reductions in variety following a merger are not anticompetitive" and that "[m]ergers can lead to the efficient consolidation of products." (This observation, it should be emphasized, applies to factors other than reductions in variety. For example, economies of scale can be an efficiency in some contexts but a barrier to entry in others.) These additions are significant improvements over the 1992 Guidelines, but their comparative brevity (and their ambivalence respecting a merger's effect on variety) leaves the misimpression that non-price factors are far less significant than price factors to the Commission.

In addition, the Guidelines fail to offer a clear framework for analyzing non-price considerations. First, Section 4 mentions that non-price considerations can be incorporated into the SSNIP test but does not explain what a "small but significant" change in quality or service is. Second, the Guidelines do not offer any details as to how to evaluate a merger's effect on product quality or service, saying only that the agencies "employ an approach analogous to that used to evaluate price competition." (Section 1.) Third, the test for analyzing the loss of product variety raises more questions than answers. For example, how are the agencies to determine whether a reduction of variety is due to "a loss of competitive incentives attributable to the merger"? (Section 6.4.) Fourth, the Guidelines do not address some of the key issues involving innovation market analysis. For example, how should enforcers resolve cases when the predicted price effects of a merger suggest one enforcement outcome but the innovation effects suggest a different outcome? What role, if any, do entry and repositioning play in the analysis? How does one determine a diversion ratio for products that have not been invented? Are innovation concerns limited to unilateral effects, as suggested by the Guidelines, or can innovation concerns result from coordinated behavior? These deficiencies are illustrative and not exhaustive.

This process cannot be justified on the ground that the Guidelines are supposed to be transparent—i.e., to reflect the way that ex ante merger review is conducted. These Guidelines do not describe the way that the Bureau of Competition and enforcement staff at the Commission proceed today. They also do not reflect the way that the courts proceed. Time and again, appellate courts have rejected "high" prices as a basis for inferring market or monopoly power. *See, e.g., Blue Cross & Blue Shield United v. Marshfield Clinic*, 65 F.3d 1406, 1411-12 (7th Cir. 1995) (Posner, J.); *United States v. Eastman Kodak Co.*, 63 F.3d 95, 107-09 (2d Cir. 1995); *Harrison Aire, Inc. v. Aerostar Int'l Inc.*, 423 F.3d 374, 381 (3d Cir. 2005). The district courts have likewise eschewed reliance on economic models based on margins for a variety of reasons, including their complexity (*see Staples*, 970 F. Supp. 1066; *CCC*, 605 F. Supp. 2d 26; *FTC v. Arch Coal, Inc.*, 329 F. Supp. 2d 109 (D.D.C. 2004)), because margins are dependent on exogenous factors (*see Abbott Labs. v. Teva Pharms. USA, Inc.*, 432 F. Supp. 2d 408, 428 (D.

Del. 2006)), or because the use of such economic simulation models, in the absence of substantial, verified efficiencies, will almost always predict that a transaction will have price effects (*see CCC*, 605 F. Supp. at 68-72). To the contrary, economic theories based on prices and margins are considered to be just that—theories. Although they may be considered in order to corroborate the inferences drawn from the empirical evidence, they are not substitutes for that evidence.

The antitrust defense bar and its clients do not need safe harbors. That bar (including the many who are members of the Antitrust Section) are among the best and brightest lawyers in the world. What that bar and their clients deserve is what these Guidelines promise at the outset— namely, that they will be a complete and accurate description of what our enforcement staff considers in merger investigations and that they will be a helpful guide to courts. These Guidelines are neither. Notwithstanding these flaws, however, I concur with issuance of these Guidelines. The significant advancements described at the outset warrant and deserve the Commission's support.

# SHEARMAN & STERLING LLP

#### **ANTITRUST GROUP**

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# The 2010 DOJ and FTC Horizontal Merger Guidelines: Increasing Realism While Reducing Predictability

On August 19, 2010, the DOJ and FTC released a comprehensive revision of the horizontal merger guidelines that had been issued almost two decades ago.<sup>1</sup> An overhaul was in order, since the agencies have not followed the prior guidelines for years. The revised Guidelines better reflect current agency thinking, including a greater range of potentially actionable transactions and greater roles for analytical flexibility and agency judgment in assessing transactions. The more aggressive and flexible tone of the revised Guidelines is likely intended to help the agencies in litigation, where some courts have criticized the agencies for departing from the more structured approach of the prior guidelines. However, since the agencies have been operating internally under the new models for some time, we expect no major change going forward in merger enforcement decision making.

#### The context

In principle, merger guidelines describe the approach the agencies use in analyzing mergers and acquisitions for the benefit of the agency staff, who must make enforcement recommendations to senior management, as well as the business community and the bar, who must consider how the antitrust agencies are likely to react to potential transactions. Guidelines also serve to educate the courts about the analytics the agencies use in evaluating transactions, presumably with the hope that the courts will defer to the agencies' expertise and gravitate to the same approach.

Beginning in the 1960s and continuing today, courts have held that a horizontal merger is presumptively unlawful if the transaction produces a combined firm with an "undue" market share in a sufficiently concentrated market. But the early standards for defining markets—which determine both market shares and market concentration—were nebulous at best. Without a meaningful standard, courts tended to defer to the government agencies, resulting in Justice Potter Stewart's famous observation "that the sole consistency that I can find [in antitrust merger litigation] is that the government always wins."

In 1982, the DOJ issued merger guidelines that, among other things, rejected limiting market concentration as the objective of merger antitrust law in favor of preventing mergers that create or facilitate the exercise of market power to the harm of

<sup>&</sup>lt;sup>1</sup> The revised guidelines may be found at http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf.

consumers. Using this consumer welfare standard, the 1982 Guidelines provided a rigorous analytical approach to defining relevant antitrust markets and raised the thresholds of market share and concentration necessary to invoke a presumption of likely anticompetitive effect. The 1982 Guidelines, which many mark as a milestone of modern antitrust law, were intentionally rigid and formulaic, precisely because they were designed to eliminate fuzziness and unpredictability in merger antitrust analysis. The 1982 Guidelines also focused almost exclusively on the price effects of transactions, because the economic theory of price effects was reasonably well-developed and accepted, while the theory on nonprice effects—product quality, product choice, and innovation—was far behind in development, acceptance, and predictive value.

The 1992 DOJ/FTC revisions, which introduced the theories of "coordinated interaction" and "unilateral effects" and required that the anticompetitive mechanism of a putatively unlawful transaction strictly fit into one of these theories, retained the basic design, price focus, and programmatic approach of the 1982 Guidelines. Horizontal merger analysis was to follow a strict sequence: market definition, calculation of market shares and market concentration, application of the thresholds of presumptive illegality, fitting of the facts into one of the two theories of anticompetitive harm, and consideration of entry and efficiencies defenses.

#### The impetus for change

Two developments motivated the 2010 revisions. First, the agencies came to believe that the Guidelines were too inflexible in their approach and if strictly followed would allow some anticompetitive mergers to avoid challenge. Over time, the agencies internally adopted new approaches to merger analysis to the point where many elements of the 1992 Merger Guidelines—including market definition—were largely irrelevant to prosecutorial decision-making.

Second, despite some initial reluctance, courts increasingly accepted the Guidelines approach, especially as to market definition. But some courts rejected agency challenges when they concluded that the agency had departed from the Guidelines, either because the agencies failed to prove an element required by the Guidelines or because the court applied the Guidelines algorithms—especially on market definition—to the facts to reach different conclusions than the agencies.

### The changes

The 2010 revisions are designed to conform the Guidelines to the actual practices of the agencies and, although not explicitly acknowledged by the agencies, to provide the agencies with more flexibility in challenging transactions in court without the prospect that the Guidelines will be cited or otherwise used against them. To this end, the 2010 revisions make four major thematic changes and a number of other less significant modifications.

#### New, flexible approach to analyzing competitive effect

Although the revised Guidelines continue to view the purpose of antitrust merger enforcement as preventing the creation, enhancement, or entrenchment of market power to the harm of consumers, they stress that the agencies need not and do not approach merger analysis in the linear fashion prescribed by the guidelines for the last 28 years. Rather, in addressing the central question of whether consumers will be harmed, the revised Guidelines—consistent with current practice over the last several years—hold that the agencies may use whatever tools and approaches the agencies thinks are appropriate. In other words, the agencies, "guided by their extensive experience," may employ any reliable means of analyzing the competitive effect of a transaction on customers.

The revised Guidelines are explicit that they only illustrate and not exhaust the range of tools and approaches the agencies may use in analyzing a transaction. And even for the approaches they illustrate, they are mostly qualitative rather than quantitative in their explication. For example, the 2010 Guidelines have eliminated several quantitative thresholds that were designed to prevent aggressive enforcement applications, notably the two-year period for evaluating ease of entry and the requirement in an

unilateral effects challenge that the merging firms have a combined market share of at least 35 percent. Moreover, while the revised Guidelines offer a large number of helpful illustrative examples, the examples tend to be factually specific and the guidelines give little or no guidance of how much the facts can change before the conclusions also change.

The upshot is that the 2010 Guidelines will be less useful in predicting agency enforcement behavior. A literal reading of the 2010 Guidelines will yield far more actionable transactions than we believe the agencies will choose to challenge. We believe that this is an intentional feature of the revised Guidelines, designed to permit the agencies to exercise more judgment in evaluating the potential competitive effects of a merger without the risk that a party or a court will cite the Guidelines against them when they do bring a challenge. However, because the agencies have already been applying for some time the approaches described in the revisions, experienced practitioners should be able to predict agency decision-making in particular transactions reasonably well.

#### New emphasis on nonprice dimensions of anticompetitive harm

With a more flexible approach to analyzing anticompetitive effect, the revised Guidelines also place much greater emphasis on harm to customers arising from reduced product quality, reduced product variety, reduced service, or diminished innovation. This is a substantial change to the prior guidelines, which made only a passing reference to nonprice anticompetitive effects.

There is little experience, and almost no jurisprudence, on the relationship between mergers and these nonprice variables, although the agencies have obtained consent decrees, almost all in the pharmaceutical sector, on the basis that the merger will reduce incentives to continue with existing product development efforts. If the agencies elect to challenge mergers based on their predicted nonprice effects, they will be operating in largely uncharted waters. The existing economic theory and legal precedent on the relationship between mergers and nonprice welfare effects remains mostly ad hoc and sensitive to the assumptions of the model. In this context, reduced product variety could be especially problematic for the parties, since in many mergers the combined firm will seek to reduce costs by consolidating two differentiated premerger product offerings into a single postmerger offering.

Our view, however, is that the agencies will not aggressively pursue transactions solely on the basis of nonprice effects. Rather, they are likely to devote attention to potential welfare-reducing nonprice effects in cases that are otherwise actionable because of their price effects. However, when the direct evidence of a consumer welfare-reducing nonprice effect is sufficiently strong, we expect the agencies to challenge the transaction even in the absence of adverse price effect.

#### Deemphasis of market definition in favor of more direct evidence of competitive effect

For almost 50 years, courts consistently have used market definition, and the resulting market shares and market concentration in the defined market, as the sole means to assess the legality of horizontal transactions under the antitrust laws. Under this approach, horizontal combinations are unlawful when they create a firm with an "undue" market share in a sufficiently concentrated market.

Until now, the DOJ and FTC have accepted this approach and with rare exception tried their merger cases in the courts accordingly. In both their judicial challenges and their merger guidelines, the agencies focused on creating an algorithm to make market definition analytically sound and to specify market share and market concentration thresholds that were more consistent with the economic theory of the day.

The 2010 Guidelines move in a decidedly different direction. The revised Guidelines relegate market definition to just one of a number of tools the agencies may use in assessing competitive effect. In place of market definition, the revised Guidelines place much greater emphasis on more direct evidence of competitive effects. This direct evidence approach, which the

agencies have used internally for several years, is consistent with many rule of reason cases under Section 1 of the Sherman Act. To date, however, the agencies have not pressed this approach on the courts, and given the language of the Clayton Act and the multiple Supreme Court precedents that expressly require the courts to locate the threatened anticompetitive effect in a "line of commerce" (product market) and a "section of the country" (geographic market), it is questionable whether the courts will be receptive to the direct evidence approach contained in the Guidelines in the absence of a traditional analysis of market definition, market shares and market concentration.

According to the revised Guidelines, direct evidence of anticompetitive effect may include, among other things, (1) documents or testimony from the merging parties indicating an intention to raise prices or otherwise harm consumers through means enabled by the merger; (2) the financial terms of the transaction, especially when they suggest that the combined firm will have to raise prices or otherwise act anticompetitively to make the transaction profitable to the buyer's owners; (3) information from customers about the extent to which they could protect themselves from an anticompetitive price increase or other harm by the merged firm; (4) "natural experiments" resulting from the historical impact of mergers, entry, expansion, or exit in same or a similar marketplace; (5) indications of substantial head-to-head competition that would be eliminated with the merger; and (6) indications of disruptive or "maverick" conduct of a merging party, which is likely to be eliminated by the merger.

For consummated transactions, the agencies will give "substantial weight" to any actual consumer harm attributable to the transaction. Indeed, the 2010 Guidelines suggest that, in a proper case, nothing more than a price increase may be necessary to support an agency decision to challenge the transaction. By contrast, consistent with the case law, the agency may give only limited weight to the absence of an actual anticompetitive effect in a consummated transaction, especially if there is reason to believe that the combined firm was moderating its conduct in light of the prospect of a postmerger review.

The revised Guidelines recognize that market shares and market concentration also can provide important, although not essential, evidence. When this evidence is used, markets must be defined using the traditional "hypothetical monopolist" test first introduced in the 1982 Guidelines to identify relevant markets in which market power can be exercised. But unlike the prior guidelines, which were designed to arrive at a unique market definition, the 2010 Guidelines appear to recognize essentially any market definition where a hypothetical monopolist could exercise market power. This approach could lead to multiple market definitions existing simultaneously, significantly increasing the agencies' flexibility to define markets and hence bring challenges.

The 2010 Guidelines also increase the market share and market concentration thresholds that trigger a presumption that a transaction may be anticompetitive.<sup>2</sup> We do not consider this change to be of much practical significance. It has been commonly accepted for many years that the thresholds in the prior guidelines were much too low compared to the agencies' actual enforcement decisions. Our view is that the 2010 thresholds will prove to continue to be too low and the agencies will rarely challenge transactions unless they are significantly above the new thresholds, at least in cases that depend on the standard presumption and not direct evidence of anticompetitive effect. Nonetheless, by continuing to set the thresholds at a relatively low level, the agencies will be able to argue in court that most challenged transactions far exceed their guidelines as well as reserve the ability to challenge lower concentration combinations without the Guidelines being cited against them.

<sup>&</sup>lt;sup>2</sup> The Guidelines' thresholds are measured in terms of the postmerger Herfindahl-Hirschman Index (HHI), which is the sum of the squares of the market shares for all of the firms in the relevant market. Under the 2010 Guidelines, mergers that result in an unconcentrated market (HHI less than 1500, which would result from a market containing a little more than six equivalently-sized firms) or mergers that produce a change in the HHI of less than 100 are regarded as unlikely to have adverse competitive effects and ordinarily will require no further analysis. Mergers in moderately concentrated markets (HHI between 1500 and 2500, or between four and six equivalently-sized firms) that produce a change in the HHI of over 100 potentially raise significant competitive concerns. Mergers in highly concentrated markets (HHI over 2500) that produce a change in the HHI of between 100 and 200 potentially raise significant competitive concerns, while those that produce a change in the HHI of over 200 are presumed to be anticompetitive.

#### Increased emphasis on unilateral effects and on targeted customers

Merger antitrust law has historically been grounded in oligopoly theory, which holds combinations of significant competitors in concentrated markets are anticompetitive because they increase the prospect of collusion across the market. The 1992 Guidelines termed this theory "coordinated interaction" and distinguished it from "unilateral effects," which depends only on the elimination of significant competition between the merging firms and not on any marketwide coordination. Significantly, under the unilateral effects theory, a transaction can eliminate substantial premerger competition between the merging parties and result in an actionable competitive threat even in an unconcentrated market.

Unilateral effects theory quickly became the dominant method employed by the agencies for evaluating horizontal mergers, since it was relatively easy to apply in practice—especially as the agencies gravitated away from the quantitative requirements contained in the prior guidelines and hence did not require the agencies to define markets—and adverse unilateral effects were almost always present in every actionable coordinated effects case anyway. But for the most part the agencies did not seriously press a pure unilateral effects theory on the courts in what might appear otherwise to be relatively unconcentrated markets. Rather, the agencies attempted to define relevant markets narrowly around the products of the merging firms, so that the market shares and market concentration would be sufficiently high to trigger the standard judicial presumption of anticompetitiveness.

Not surprisingly, some courts rejected the prosecuting agency's narrow market definitions as artificial, finding the markets were much broader and concluding that competition in these broader markets was sufficient to ensure that the markets remained competitive postmerger. Other courts rejected the application of the theory of unilateral effects to the facts, finding that the agency had not satisfied some of the requirements in the existing Guidelines.

The 2010 Guidelines seek to elevate the theory of unilateral effects to a level at least on par with coordinated interaction and to make the application of the theory more robust. The reduced role of market definition is a major element in this effort. The 2010 Guidelines also eliminate certain requirements of the prior guidelines—specifically that the merged firm have a combined 35 percent share in the relevant market and that the products of the merging parties be each other's next best substitutes for a large fraction of customers—in order to give the theory more flexibility and reach in application.

The 2010 Guidelines also state that competition between the merging firms may exist for only certain customers and not be marketwide. In many situations, the nature of the product or service being offered will not permit arbitrage or resale in a secondary market, so that different groups of customers may be treated differently. In the extreme, as may occur when sales are individually negotiated, each customer may be treated differently and constitute its own group. The 2010 Guidelines hold that the unilateral effects theory can reach a transaction even if the threatened anticompetitive effect extends to only a targeted group of customers and not to customers in the market as a whole.

While the new qualitative nature of the theory, especially the broadened scope permitted by customer targeting, will give the agencies more flexibility and call for the exercise of more agency judgment, the agencies have been applying this approach for some time. Although a strict reading of the 2010 Guidelines is likely to substantially overpredict enforcement challenges, experienced practitioners should be able to assess with reasonable accuracy when the agencies will actually employ the theory to challenge a transaction in the future.

#### Raising the bar on entry and repositioning defenses

The case law recognizes several defenses to a presumption of anticompetitive effect in a properly defined market. One of the most important is entry. The idea is that when entry is easy, even if a merger creates a firm with a large combined share in a highly concentrated market, entry will ensure that the market continues to function competitively postmerger.

The agencies, and the prior merger guidelines, always have been demanding in the evidence required to make a valid entry defense. The 2010 Guidelines increase the demands on the parties: while the prior guidelines permitted entry to be evaluated over a period of two years, the revised Guidelines adopt the more ambiguous but presumably more restrictive requirement that entry be "rapid enough" to ensure that no meaningful anticompetitive effect will result from the merger. We believe that under this requirement the agencies will demand that the parties show that sufficient entry is likely to occur in a timeframe considerably shorter than two years in most cases.

Repositioning by nonmerging firms to take advantage of and thereby compete away any attempt by the merged firm to act anticompetitively can also be an important element of a merger defense. In some recent transactions, the agencies have exhibited significant skepticism as an analytical matter to repositioning as a means of ensuring competition. The 2010 Guidelines view repositioning as a supply-side response that should be evaluated much like entry, and we expect the agencies to apply the same demanding standards to repositioning as they are towards entry.

#### Other areas

The 2010 Guidelines make modifications in other areas, but these are not likely to be as significant to horizontal merger enforcement as the areas just discussed. For example, the revised Guidelines ease the requirements for applying a coordinated interaction theory, but even as reformulated coordinated effects almost surely will continue to take a back seat to unilateral effects as the primary theory motivating agency challenges. Likewise, the 2010 Guidelines make a number of changes to the treatment of efficiencies, including a greater acceptance of fixed cost efficiencies, but maintain the historical agency antipathy toward efficiency defenses. If anything, the revisions are even more demanding on the reliability and quantum of proof necessary to advance an efficiencies defense than the prior guidelines.

The revised Guidelines also cover a number of areas that have been a standard part of horizontal merger review that were not addressed in the prior guidelines. These include the competitive analysis of auction markets, the countervailing influence of powerful buyers, mergers of competing buyers (monopsony), and acquisitions of minority positions involving competing firms (partial acquisitions).

This publication is intended only as a general discussion of these issues. It should not be regarded as legal advice. We would be pleased to provide additional details or advice about specific situations if desired.

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