1982 MERGER GUIDELINES

I. PURPOSE AND UNDERLYING POLICY ASSUMPTIONS

These Guidelines state in outline form the present enforcement policy of the U.S. Department of Justice ("Department") concerning acquisitions and mergers ("mergers") subject to section 7 of the Clayton Act¹ or to section 1 of the Sherman Act.² They describe the general principles and specific standards normally used by the Department an analyzing mergers.³ By stating its policy as simply and clearly as possible, the Department hopes to reduce the uncertainty associated with enforcement of the antitrust laws in this area.

Although the Guidelines should improve the predictability of the Departments merger enforcement policy, it is not possible to remove the exercise of judgment from the evaluation of mergers under the antitrust laws. Difficult factual questions arise under the standards stated below, and the Department necessarily will base its decision on the data that are practicably available in each case. Moreover, the standards represent generalizations to which some exceptions are inevitable. In appropriate cases, the Department will challenge mergers that are competitively objectionable under the general principles of the Guidelines regardless of whether they are covered by the specific standards. Finally, the Guidelines are designed primarily to indicate when the Department is likely to challenge mergers, not how it will conduct the litigation of cases that it decides to bring. Although

¹15 U.S.C.A. § 18 (1981). Mergers subject to section 7 are prohibited if their effect "may be substantially to lessen competition, or to tend to create a monopoly."

²15 U.S.C.A. § 1 (1981). Mergers subject to section 1 are prohibited if they constitute a "contract, combination... or conspiracy in restraint of trade."

³They replace a set of Guidelines issued by the Department in 1968, and are subject to further revision in light of subsequent judicial decisions or economic studies. Although changes in enforcement policy may precede the issuance of amended Guidelines, the Department will attempt to conform the Guidelines to such changes as soon as possible.

relevant in the latter context, the factors contemplated in the standards do not exhaust the range of evidence that the Department may introduce in court.⁴

The unifying theme of the Guidelines is that mergers should not be permitted to create or enhance "market power" or to facilitate its exercise. 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. Where only a few firms account for most of the sales of a product, those firms can in some circumstances coordinate, explicitly or implicitly, their actions in order to approximate the performance of a monopolist. This ability of one or more firms profitably to maintain prices above competitive levels for a significant period of time is termed "market power." Sellers with market power also may eliminate rivalry on variables other than price. In either case, the result is a transfer of wealth from buyers to sellers and a misallocation of resources.⁵

Although they sometimes harm competition, mergers generally play an important role in a free enterprise economy. They can penalize ineffective management and facilitate the efficient flow of investment capital and the redeployment of existing productive assets. While challenging competitively harmful mergers, the Department seeks to avoid unnecessary interference with that larger universe of mergers that are either competitively beneficial or neutral. In attempting to mediate between these dual concerns, however, the Guidelines reflect the congressional intent that merger enforcement should interdict competitive problems in their incipiency.

⁴Parties seeking more specific advance guidance concerning the Department's enforcement intentions with respect to any particular merger should consider using the Business Review Procedure. 28 C.F.R. § 50.6.

⁵"Market power" also encompasses the ability of a single buyer or group of buyers to depress the price paid for a product to a level that is below the competitive price. Market power by buyers has wealth transfer and resource misallocation effects analogous to those associated with market power by sellers.

II. MARKET DEFINITION AND MEASUREMENT

Using the standards stated below, the Department will define and measure the market for each product or service ("product") of each of the merging firms. A market is a group of products and an associated geographic area with certain economic characteristics that will be described in subsequent paragraphs. In theory, all the demand and supply forces relevant to the evaluation of a merger could incorporated in the definition of a market. Under the Guidelines, however, market definition is not the exclusive analytical technique through which the Department considers those forces. For example, because the potential new entry from the construction of new facilities and from the substantial modification of existing facilities is not easily captured in conventional market statistics, the Department takes such entry into account in interpreting market statistics. Taken as a whole, however, the standards in the Guidelines are designed to ensure that, whenever the Department challenges a merger, the firms in the affected market could exercise market power if they were able to coordinate their actions.

A. Product Market Definition

The first task in market definition is to determine what products to include in the market for the product of the merging firm.⁷ In general, the Department seeks to identify a group of products

⁶In contrast to the comprehensive definition suggested in this paragraph of the text, the market definition used by the Department can be stated formally as follows: "a market consists of a group of products and an associated geographic area such that (an the absence of new entry) a hypothetical, unregulated firm that made all the sales of those products in that area could increase its profits through a small but significant and non-transitory increase in price (above prevailing or likely future levels)." The standards for market definition in the text below implement this decision.

⁷The analysis that follows will be repeated for each product of each merging firm.

such that a hypothetical firm⁸ that was the only present and future seller of those products could raise price profitably. That is, assuming that buyers could respond to an increase in price for a tentatively identified product group only by shifting to other products, what would happen? If readily available alternatives were, in the aggregate, sufficiently attractive to enough buyers, an attempt to raise price would not prove profitable, and the "market" would prove to have been too narrowly defined.

Taking the product of the merging firm as a beginning point, the Department will establish a provisional product market. The Department will include in the provisional market those products that the merging firm's customers view as good substitutes at prevailing prices. The potential weakness of such a market based solely on existing patterns of supply and demand is that those patterns might change substantially if the prices of the products included in the provisional market were to increase. For this reason, the Department will test further and, if necessary, expand the provisional market. The Department will add additional products to the market if a significant percentage of the buyers of products already included would be likely to shift to those other products in response to a small but significant and non-transitory increase in price. As a first approximation, the Department will hypothesize a price increase of five percent and ask how many buyers would be

⁸In Sections III (A) and III (C), the Guidelines discuss factors affecting the ability of a group of sellers, by coordinating their actions, to approximate the performance of a single firm.

⁹On occasion, the Department may base this analysis on likely future prices, provided that the relevant price relationships can be projected with confidence.

likely to shift to the other products within one year.¹⁰ The Department will continue expanding the provisional market until it satisfies the general profitability standard stated above.¹¹

In evaluating product substitutability,¹² the Department will consider any relevant evidence, but will give particular weight to the following factors:

- 1) Evidence of buyers' perceptions that the products are or are not substitutes, particularly if those buyers have shifted purchases between the products in response to changes in relative price or other competitive variables;
- 2) Similarities or differences between the products in customary usage, design, physical composition and other technical characteristics;
- 3) Similarities or differences in the price movements of the products over a period of years; and
- 4) Evidence of sellers' perceptions that the products are or are not substitutes, particularly if business decisions have been based on those perceptions.

¹⁰ The purpose of hypothesizing a price increase is to interject a dynamic element in the analysis as a conceptual aid and in determining the outer limits of the market. Judged by the effect on rate of return on invested capital, a given percentage price increase may be much more significant in some industries than in others.

Direct evidence of the likely effect of a price increase often will not be available, particularly in the context of the Department's prelitigation evaluation of a merger. As a result, the Department often will have to rely on inferences from the types of circumstantial evidence described in the text below. For consistency, the Department will assume that buyers and sellers immediately recognize the price increase and believe that it will be sustained for the foreseeable future.

¹¹The Department normally will not expand the market beyond the point at which this standard is satisfied unless it is convinced that independent competitive concerns exist in a larger market.

¹²In constructing and expanding the provisional market, the Department will not exclude any product that is at least as good a substitute as any product included. The Department will refer to the products included in the market collectively as the "relevant product."

The analysis of product market definition to this point has assumed that price discrimination-charging different buyers different prices for products having the same cost, for example--would not be possible after the merger. Existing buyers sometimes will differ significantly in their assessment of the adequacy of a particular substitute and the ease with which they could substitute it for the product of the merging firm. Even though a general increase in price might cause such significant substitution that it would not be profitable, sellers who can price discriminate could raise price only to groups of buyers who cannot easily substitute away.¹³ If such price discrimination is possible, the Department will consider defining additional, narrower relevant product markets oriented to the buyer groups subject to the exercise of market power.¹⁴

B. Identification of Firms that Produce the Relevant Product

In most cases, the Department's evaluation of a merger will focus primarily on firms that currently produce and sell the relevant product. In addition to those firms, however, the Department may include additional firms in the market in certain circumstances.¹⁵

¹³Price discrimination requires that sellers be able to identify those buyers and that other buyers be unable profitably to purchase and resell to them.

¹⁴Price discrimination is discussed in the Guidelines because it is sometimes a manifestation of market power created by a merger. In the context described in the text, a price increase to one group of buyers, reducing quantities purchased by that group, will not be accompanied by a price reduction and output increase to the other group. Hence, its effects on consumer welfare are unambiguously negative. It is important to distinguish that situation from the one in which a firm already possesses market power and is likely to exercise it, whether or not it is able to practice price discrimination. In the latter situation, price discrimination often results in an expansion of output, thus reducing the resource misallocation associated with market power.

¹⁵The situations described in the text below are particularly subject to difficult questions of degree. In such cases, it is often useful to calculate market shares based on alternative reasonable assumptions--for example, with and then without a particular type of facility arguably capable of easy and economical production substitution. In its evaluation of such cases, the Department will take into account the closeness of the issue, whichever way it is resolved for calculation of market statistics.

1. <u>Production Substitution</u>. The same productive and distributive facilities can sometimes be used to produce and sell two or more products that buyers do not regard as good substitutes. Production substitution refers to the shift by a firm in the use of facilities from producing and selling one product to producing and selling another. Depending upon the cost and speed of that shift, production substitution may allow firms that do not currently produce the relevant product to respond effectively to an increase in the price of that product.¹⁶

If a firm has existing productive and distributive facilities that could easily and economically be used to produce and sell the relevant product within six months in response to a small but significant and non-transitory increase in price, the Department will include those facilities in the market.¹⁷ As a first approximation, the Department will hypothesize a price increase of five percent and ask how many firms would be likely to change to the production and sale of the relevant product within six months.¹⁸ Firms that must construct significant new productive or distributive facilities in order to produce and sell the relevant product will not be included in the market, although the Department will consider their competitive significance in evaluating entry conditions generally.¹⁹

¹⁶Under 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 Department 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 Department may use an aggregate description of those markets as a matter of convenience.

¹⁷The amount of sales or capacity to be included in the market is a separate question discussed in Section 11(D), below.

¹⁸See note 10, above.

¹⁹See Section 111(B), below.

- 2. <u>Durable Products</u>. Some long-lived products may continue to exert competitive influence after the time of original sale. If, under the standards stated in Section 11(A), recycled or reconditioned products represent good substitutes for new products, the Department will include in the market firms which recycle or recondition those products.
- 3. <u>Internal Consumption</u>. Captive production and consumption of the relevant product by vertically integrated firms are part of the overall market supply and demand. Such firms are free to buy or sell in the market, and they incur an opportunity cost for units they consume rather than sell. The increase in that cost resulting from an increase in the market price may induce a change in behavior. The Department will include in the market the facilities that are used to produce the relevant product.²⁰

C. <u>Identification of Firms that Produce the Relevant Product at Relevant Locations (Geographic Market Definition)</u>

For each product market of each merging firm, the Department will determine the geographic market(s) in which that firm sells. The purpose of geographic market definition is to establish a geographic boundary that roughly separates firms that are important factors in the competitive analysis of a merger from those that are not. Depending on the nature of the product, the geographic market may be as small as a part of a city or as large as the entire world. Moreover, a single firm may operate in a number of economically discrete geographic markets.

In general, the Department seeks to identify a geographic area such that a hypothetical firm that was the only present or future producer of the relevant product in that area could profitably raise price. That is, assuming that buyers could respond to a price increase within a tentatively identified

²⁰See note 17, above. In evaluating the competitive significance of internally consumed production, the Department will consider whether the vertically integrated firm, either through sales of the relevant product or through sales of the products in which the relevant product is embodied, could frustrate an effort by the sellers of the relevant product to exercise market power.

area only by shifting to firms located outside the area, what would happen? If firms located elsewhere readily could provide the relevant product to the hypothetical firm's buyers in sufficient quantity at a comparable price, an attempt to raise price would not prove profitable, and the "market" would prove to have been too narrowly defined.

Taking the location of the merging firm (or each plant, for multi-plant firms) as a beginning point, the Department will establish a provisional geographic market based upon the shipment patterns firm and its closest competitors.²¹ The potential weakness of such a market boundary based on existing patterns of supply and demand is that those patterns might change substantially if the price within the provisional market were to increase. For this reason, the Department will test further and, if necessary, expand the provisional market. The Department will expand the provisional market boundaries to include the locations of firms (or plants) that could make significant sales to customers of firms previously included in the provisional market in response to a small but significant and non-transitory increase in price. As a first approximation, the Department will hypothesize a price increase of five percent and ask how many sellers could sell the product to such customers within one year.²² The Department will continue expanding the provisional market until it satisfies the general profitability standard stated above.²³

²¹Because the definition of geographic markets in the guidelines is an area derived from the location of sellers facilities, the area may not always exhibit characteristics associated with traditional geographic market definitions that are based, in whole or part, on buyer locations. Nevertheless, as a rule of thumb, the merging firm should make a significant percentage of its sales in the provisional market and firms located outside it collectively should account for a small percentage of total sales there. It is possible that a geographic market could include only one firm.

²²See note 10, above. In some cases, a general expansion of the market boundaries may overstate the likely supply response. If a specific firm has a particular ability to sell in the provisional market that is not shared by other firms in that firm's area, the Department will treat that firm alone as being in the market.

²³See note 11, above.

In evaluating geographic substitutability,²⁴ the Department will consider any relevant evidence, but will give particular weight to the following factors:

- 1) Evidence of buyers actually having shifted their purchases among sellers at different geographic locations, especially if the shifts corresponded to changes in relative price or other competitive variables;
- 2) Similarities or differences in the price movements of the relative product in different geographic areas over a period of years;
 - 3) Transportation costs;
 - 4) Costs of local distribution; and
 - 5) Excess capacity by firms outside the provisional market.

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 locations, for example--would not be possible after the merger. As in the case of product market definition, however, where price discrimination is possible, ²⁵ the Department will consider defining additional, narrower geographic markets oriented to those buyer groups subject to the exercise of market power.

In general, the standards stated above will govern geographic market definition, whether domestic or international. The Department, however, will be somewhat more cautious, both in expanding market boundaries beyond the United States and in assessing the likely supply response of specific foreign firms. Although firms located outside the United States may exert an important

²⁴In constructing and expanding the provisional market, the Department will not exclude any area if production there is at least as good a substitute as production that is included.

²⁵See notes 13-14, above. Geographic price discrimination against a group of buyers is more likely when other buyers cannot easily purchase and resell the relevant product to them. Such arbitrage is particularly difficult where the product is sold on a delivered basis and where transportation costs are a significant percentage of the final coat.

competitive influence on domestic prices, they may be subject to additional constraints not present in the purely domestic context. For example, changes in exchange rates, tariffs, and general political conditions may limit the ability of such firms to respond to domestic price increases.

D. <u>Calculating Market Shares</u>

The Department normally will include in the market the total sales or capacity²⁶ of all firms (or plants) that are identified as being in the market in Sections II(B) and II(C). In some cases, however, total sales or capacity may overstate the competitive significance of a firm. With respect to firms included in the market under Sections II(B)(l) (production substitution) and II(B)(3) (internal consumption), for example, the Department will include only those sales likely to be made or capacity likely to be used in the geographic market in response to a small but significant and non-transitory increase in price. As a first approximation, the Department will hypothesize a price increase of five percent and ask what the likely response of the firms would be within one year.²⁷

Similarly, a firm's capacity may be so committed elsewhere that it would not be available to respond to an increase in price in the market. In such cases, the Department also may include a smaller part of the firm's sales or capacity.

III. HORIZONTAL MERGERS

Where the merging firms are in the same product and associated geographic market, the merger is horizontal. In such cases, the Department will focus first on the post-merger concentration of the market and the market shares of the merging firms. In some cases with low post-merger market

²⁶Market shares can be expressed in terms of dollar sales, physical unit sales, physical capacity, or (in natural resource industries) physical reserves. The availability of data often will determine the measurement base. Where a choice is possible, the Department will use the measurement base that is the best indicator of the likely effect of the merger on market power.

²⁷See note 10, above. It follows that some firms included in the market might have little or no sales or capacity attributed to them. Conversely, the present sales or capacity of a firm may understate its competitive significance. This effect is most likely in the acquisition of new or asyet-unexploited patent rights.

concentration and/or market shares, the Department will be able to determine without a detailed examination of other factors that the merger poses no significant threat to competition. In other cases, however, the Department will proceed to examine a variety of other factors relevant to that question.

A. <u>Concentration and Market Share</u>

Market concentration is a function of the number of firms in a market and their respective market shares.²⁸ Other things being equal, 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. Where collective action is necessary, an additional constraint applies. As the number of firms necessary to control a given percentage of total supply increases, the difficulties and costs of reaching and enforcing consensus with respect to the control of that supply also increase.

As an aid to the interpretation of market data, the Department 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 firms included in the market under the standards in Section II.²⁹ Unlike the traditional 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

²⁸Markets can range from atomistic, where very large numbers of firms that are small relative to the overall size of the market compete with one another, to monopolistic, where one firm controls the entire market. Far more common, and more difficult analytically, is the large middle range of instances where a relatively small number of firms account for most of the sales in the market.

 $^{^{29}}$ 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 ($30^2 \times 30^2 \times 20^2 \times 20^2 \times 20^2 = 2600$). 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 fringe firms is not critical because such firms do not affect the HHI significantly.

also gives proportionately greater weight to the market shares of the larger firms, which probably accords with their relative importance in any collusive interaction.

The Department 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). An empirical study by the Department of the size dispersion of firms within markets indicates that the critical HHI thresholds at 1000 and 1800 correspond roughly to four-firm concentration ratios of 50 percent and 70 percent, respectively. Although the resulting regions provide a useful format 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 concerns.

1. <u>General Standards</u>. In evaluating horizontal mergers, the Department will consider both the post-merger market concentration and the increase in concentration resulting from the merger.³⁰ The link between concentration and market power is explained above. The increase in concentration is relevant to several key issues. Although mergers among small firms increase concentration, they are less likely to have anticompetitive consequences. Moreover, even in concentrated markets, it is desirable to allow firms some scope for merger activity in order to achieve economies of scale and to permit exit from the market.

The general standards for horizontal mergers are as follows:

 $^{^{30}}$ 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. Thus: $(a)^2 x (b)^2$. After the merger, the sum of those shares would be squared. Thus: $(a + b)^2$, which equals $a^2 + 2ab + b^2$. The increase in the HHI therefore is represented by 2ab.]

- a) <u>Post-Merger HHI Below 1000</u>. Markets in this region generally would be considered to be unconcentrated, having the equivalent of at least 10 equally sized firms. Because implicit coordination among firms is likely to be difficult and because the prohibitions of section 1 of the Sherman Act are usually an adequate response to any explicit collusion that might occur, the Department is unlikely to challenge mergers falling in this region.
- b) <u>Post-Merger HHI Between 1000 and 1800</u>. Because this region extends from the point at which the competitive concerns associated with concentration become significant to the point at which they become quite serious, generalization is particularly difficult. The Department, however, is unlikely to challenge mergers producing an increase in the HHI of less than 100 points.³¹ The Department is more likely than not to challenge mergers in this region that produce an increase in the HHI of more than 100 points. In making that decision, however, the Department will take into account the post-merger concentration of the market, the size of the resulting increase in concentration, and the presence or absence of the other factors discussed in Sections III(B) and III(C).
- c) <u>Post-Merger HHI Above 1800</u>. Markets in this region generally are considered to be highly concentrated, having the equivalent of no more than approximately six equally sized firms. Additional concentration resulting from mergers is a matter of significant competitive concern, and the Department will resolve close questions in favor of challenging the merger. The Department is unlikely, however, to challenge mergers producing an increase in the HHI of less than 50 points.³² For mergers producing an increase in the HHI of from 50 to 100 points, the Department will base

³¹ Mergers producing increases in concentration close to the 100 point threshold include those between firms with market shares of 25 percent and 2 percent, 16 percent and 3 percent, 12 percent and 4 percent, 10 percent and 5 percent, 8 percent and 6 percent, and 7 percent and 7 percent.

³²Mergers producing increases in concentration close to the 50 point threshold include those between firms with market shares of 12 percent and 2 percent, 8 percent and 3 percent, 6 percent and 4 percent, and 5 percent and 5 percent.

its decision whether to challenge the merger on the post-merger concentration of the market, the size of the resulting increase in concentration, and the presence or absence of the factors discussed in Sections III (8) and III (C). The Department is likely to challenge mergers in this region that produce an increase in the HHI of 100 points or more.³³

2. <u>Leading Firm Proviso.</u> In some cases, typically where one of the merging firms is small, mergers that may create or enhance the market power of a single dominant firm could pass scrutiny under the standards stated in Section III(A)(l). Notwithstanding those standards, the Department is likely to challenge the merger of any firm with a market share of at least 1 percent with the leading firm in the market, provided that the leading firm has a market share that is at least 35 percent and is approximately twice as large as that of the second largest firm in the market. Because the ease and profitability of collusion are of little relevance to the ability of a single dominant firm to exercise market power, the Department will not consider the factors discussed in Section III(C) in this context. Under this standard, an ample market for small acquisitions typically will remain, and it is unlikely that any relevant economies will be limited to mergers involving the largest firm in the market.

B. Ease of Entry.

If entry into a market is so easy that existing competitors could not succeed in raising price for any significant period of time, the Department is unlikely to challenge mergers in that market. Under the standards in Section II(B)(I), firms that do not presently sell the relevant product, but that could easily and economically sell it using existing facilities, are included in the market and are assigned a market share. This section considers the additional competitive effects of (1) production

³³There is some economic evidence that, where one or two firms dominate a market, the creation of a strong third firm enhances competition. The Department has considered this evidence but is not presently prepared to balance this possible gain against the certainty of substantially increased concentration in the market.

substitution where the necessary modifications are more substantial, and (2) entry through the construction of new facilities.

In assessing ease of entry to a market, the Department will consider the likelihood and probable magnitude of entry in response to a small but significant and non-transitory increase in price.³⁴ As a first approximation, the Department will hypothesize a price increase of five percent and ask, how much new entry would be likely to occur within two years.³⁵ In most cases in which significant entry is unlikely, the Department will not attempt to differentiate further the degrees of difficulty of entry. In cases where entry is unusually difficult, however, the Department is more likely to challenge a merger.

C. Other Factors

A variety of factors other than concentration, market shares, and ease of entry affect the likelihood that a merger will create, enhance or facilitate the exercise of market power. In evaluating mergers, the Department will consider the following factors as they relate to the ease and profitability of collusion. Where relevant, the factors are most likely to be important where the Department's decision whether to challenge a merger is otherwise close.

³⁴See note 10, above. In general, entry is more likely when the additional assets necessary to produce the relevant product are short-lived or widely used outside the particular market. Conversely, entry is less likely when those assets are long-lived and highly specialized to the particular application. Entry is generally facilitated by the growth of the market and hindered by its stagnation or decline. Entry also is hindered by the need for scarce special skills or resources and the need to achieve a substantial market share in order to realize important economies of scale. See also Section IV(B)(l)(b), below.

³⁵Although this type of supply response will take longer to materialize than those previously considered, its prospect may have a greater deterrent effect on the exercise of market power by present sellers. Where new entry involves the dedication of long-lived assets to a market, the resulting capacity and its adverse effects on profitability will be present in the market until those assets are depreciated.

1. Nature of the Product and Terms of Sale.

(a) <u>Homogeneity-Heterogeneity of the Relevant Product Generally</u>. In a market with a homogeneous and undifferentiated product, a cartel need establish only a single price--a circumstance that facilitates reaching consensus and detecting deviation. As the products which constitute the relevant product become more numerous, heterogeneous, or differentiated, however, the problems facing a cartel become more complex. Instead of a single price, it may be necessary to establish and enforce a complex schedule of prices corresponding to gradations in actual or perceived quality attributes among the competing products.³⁶

Product variation is arguably relevant in all cases, but practical considerations dictate a more limited use of the factor. There is neither an objective index of product variation nor an empirical basis for its use in drawing fine distinctions among cases. As a result, this factor will be taken into account only in relatively extreme cases where both identification and effect are more certain. For example, when the relevant product is completely homogeneous and undifferentiated, the Department is more likely to challenge the merger. Conversely, when the relevant product is very heterogeneous or sold subject to complex configuration options or customized production, the Department is less likely to challenge the merger.³⁷ Over a significant middle range of the spectrum of product variation, this factor is less likely to affect the Department's analysis.

b) <u>Degree of Difference Between the Products and Locations in the Market and the Next-Best-Substitutes</u>. The market definition standards stated in Section II require drawing relatively bright lines in order to determine the products and sellers to be considered in evaluating a merger. For example, in defining the relevant product, all "good substitutes" in demand are included. The

³⁶A similar situation may exist where there is rapid technological change or where supply arrangements consist of many complicated terms in addition to price.

³⁷This conclusion would not apply, however, where-the significance of heterogeneity is substantially reduced through detailed specifications that are provided by the buyer and that form the basis for all firms' bids.

profitability of any collusion that might occur will depend in part, however, on the quality of the next-best substitute. That is, it matters whether the next-best substitute is only slightly or significantly inferior to the last product included in the relevant product. Similarly, it matters whether the next-most-distant seller is only slightly or significantly farther away than the last seller included in the geographic market. The larger the "gap" at the edge of the product and geographic markets, the more likely the Department is to challenge the merger.

- c) Similarities and Differences in the Products and Locations of the Merging Firms. There also may be relevant comparisons among the products or sellers included in the market. Where products in a relevant market are differentiated or sellers are spatially dispersed, individual sellers usually compete more directly with some rivals than with others. In markets with highly differentiated products, the Department will consider the extent to which consumers perceive the products of the merging firms to be relatively better or worse substitutes for one another than for other products in the market. In markets with spatially dispersed sellers and significant transportation costs, the Department will consider the relative proximity of the merging firms. If the products or plants of the merging firms are particularly good substitutes for one another, the Department is more likely to challenge the merger.
- 2. <u>Information About Specific Transactions and Buyer Market Characteristics</u>. Collusive agreements are more likely to persist if participating firms can quickly detect and retaliate against deviations from the agreed prices or other conditions. Such deviations are easiest to detect, and therefore least likely to occur, in markets where detailed information about specific transactions or individual price or output levels is readily available to competitors. The Department is more likely to challenge a merger if such detailed information is available to competitors, whether the information comes from an exchange among sellers, public disclosure by buyers, reporting by the press or a government agency, or some other source.

Certain buyer market characteristics also may facilitate detection of deviation from collusive agreements. If orders for the relevant product are frequent, regular and small relative to the total output of a typical firm in the market, collusion is more likely to succeed because the benefits of departing from the collusive agreement in any single transaction are likely to be small relative to the potential costs. In order to increase its sales significantly in such circumstances, a seller would have to depart from the collusive agreement on a large number of orders. Each such sale takes customers away from other parties to the agreement, a fact that is particularly evident when demand is stable or declining. As a result, the chances of detection and effective response by other sellers increase with the number of such sales. The Department is more likely to challenge a merger where such buyer market characteristics exist.

- 3. <u>Conduct of Firms in the Market</u>. The Department is more likely to challenge a merger in the following circumstances:
- a) Firms in the market previously have been found to have engaged in horizontal collusion regarding price, territories, or customers, and the characteristics of the market have not changed appreciably since the most recent finding. The additional concentration resulting from the merger could make explicit collusion more difficult to detect or tacit collusion more feasible.
- b) One or more of the following types of practices are adopted by substantially all of the firms in the market: i) mandatory delivered pricing; ii) exchange of price or output information in a form that could assist firms in setting or enforcing an agreed price; iii) collective standardization of product variables on which the firms could compete; and iv) price protection clauses. Although not objectionable under all circumstances, these types of practices tend to make collusion easier, and their widespread adoption by the firms in the market raises some concern that collusion may already exist.
- c) The firm to be acquired has been an unusually disruptive and competitive influence in the market. Before invoking this factor, the Department will determine whether the market is one in which performance might plausibly deteriorate because of the elimination of one disruptive firm.

4. Market Performance. When the market in which the proposed merger would occur is currently performing non-competitively, the Department is more likely to challenge the merger. Non-competitive performance suggests that the firms in the market already have succeeded in overcoming, at least to some extent, the obstacles to effective collusion. Additional concentration of such a market through merger could further facilitate the collusion that already exists. When the market in which the proposed merger would occur is currently performing competitively, however, the Department will apply its ordinary standards of review. The fact that the market is currently competitive casts little light on the likely effect of the merger.

In evaluating the performance of a market, the Department will consider any relevant evidence, but will give particular weight to the following evidence of possible non-competitive performance when the factors are found in conjunction:

- a) Stable relative market shares of the leading firms in recent years;
- b) Declining combined market share of the leading firms in recent years;³⁸ and
- c) Profitability of the leading firms over substantial periods of time that significantly exceeds that of firms in industries comparable in capital intensity and risk.

IV. HORIZONTAL EFFECT FROM NON-HORIZONTAL MERGERS

By definition, non-horizontal mergers involve firms that do not operate in the same market. It necessarily follows that such mergers produce no immediate change in the level of concentration in any relevant market as defined in Section II. Although non-horizontal mergers are less likely than horizontal mergers to create competitive problems, they are not invariably innocuous. This Section describes the principal theories under which the Department is likely to challenge non-horizontal mergers.

³⁸The exercise of market power often results in a gradual loss of market share. Fringe firms find it possible and profitable to expand their sales, and new entry may occur.

A. <u>Elimination of Specific Potential Entrants</u>

- 1. The Theory of Potential Competition. In some circumstances, the non-horizontal merger³⁹ of a firm already in a market (the "acquired firm") with a potential entrant to that market (the "acquiring firm")⁴⁰ may adversely affect competition in the market. If the merger effectively removes the acquiring firm from the edge of the market it could have either of the following effects:
- a) Harm to "Perceived Potential Competition". By eliminating a significant present competitive threat that constrains the behavior of the firms already in the market, the merger could result in an immediate deterioration in market performance. The economic theory of limit pricing suggests that monopolists and groups of colluding firms may find it profitable to restrain their pricing in order to deter new entry that is likely to push prices even lower by adding capacity to the market. If the acquiring firm had unique advantages in entering the market, the firms in the market might be able to set a new and higher price after the threat of entry by the acquiring firm was eliminated by the merger.
- b) <u>Harm to "Actual Potential Competition"</u>. By eliminating the possibility of entry by the acquiring firm in a more pro-competitive manner, the merger could result in a lost opportunity for improvement in market performance resulting from the addition of a significant competitor. The more pro-competitive alternatives include both new entry and entry through a "toehold" acquisition of a present small competitor.
- 2. <u>Relation Between Perceived and Actual Potential Competition</u>. If it were always profit-maximizing for incumbent firms to set price in such a way that all entry was deterred and if information and coordination were sufficient to implement this strategy, harm to perceived potential competition would be the only competitive problem to address. In practice, however, actual

³⁹Under traditional usage, such a merger could be characterized as either "vertical" or "conglomerate," but the label adds nothing to the analysis.

⁴⁰The terms "acquired" and "acquiring" refer to the relationship of the firms to the market of interest, not to the way the particular transaction is formally structured.

potential competition has independent importance. Firms already in the market may not find it optimal to set price low enough to deter all entry; moreover, those firms may misjudge the entry advantages of a particular firm and, therefore, the price necessary to deter its entry.⁴¹

3. <u>Enforcement Standards</u>. Because of the close relationship between perceived potential competition and actual potential competition, the Department will evaluate mergers that raise either type of potential competition concern under a single structural analysis analogous to that applied to horizontal mergers. The Department first will consider a set of objective factors designed to identify cases in which harmful effects are plausible. In such cases, the Department then will conduct a more focused inquiry to determine whether the likelihood and magnitude of the possible harm justify a challenge to the merger. In this context, the Department will consider any specific evidence presented by the merging parties to show that the inferences of competitive harm drawn from the objective factors are unreliable.

The factors that the Department will consider are as follows:

- a) Market Concentration. Barriers to entry are unlikely to affect market performance if the structure of the market is otherwise not conducive to monopolization or collusion. Adverse competitive effects are likely only if overall concentration, or the largest firm's market share, is high. The Department is unlikely to challenge a potential competition merger unless overall concentration of the acquired firm's market is above 1800 HHI (a somewhat lower concentration will suffice if one or more of the factors discussed in Section III(C) indicate that effective collusion in the market is particularly likely). Other things being equal, the Department is increasingly likely to challenge a merger as this threshold is exceeded.
- b) <u>Conditions of Entry Generally</u>. If entry to the market is generally easy, the fact that entry is marginally easier for one or more firms is unlikely to affect the behavior of the firms in the market.

⁴¹When collusion is only tacit, the problem of arriving at and enforcing the correct limit price is likely to be particularly difficult.

The Department is unlikely to challenge a potential competition merger when new entry into the acquired firm's market can be accomplished by firms without any specific entry advantages under the conditions stated Section III(B). Other things being equal, the Department is increasingly likely to challenge a merger as the difficulty of entry increases above that threshold.

c) The Acquiring Firm's Entry Advantage. If more than a few firms have the same or a comparable advantage in entering the acquired firm's market, the elimination of one firm is unlikely to have any adverse competitive effect. The other similarly situated firm(s) would continue to exert a present restraining influence, or, if entry would be profitable, would recognize the opportunity and enter. The Department is unlikely to challenge a potential competition merger if the entry advantage ascribed to the acquiring firm (or another advantage of comparable importance) is also possessed by three or more other firms. Other things being equal, the Department is increasingly likely to challenge a merger as the number of other similarly situated firms decreases below three and as the extent of the entry advantage over non-advantaged firms increases.

If the evidence of likely actual entry by the acquiring firm is particularly strong,⁴² however, the Department may challenge a potential competition merger, notwithstanding the presence of three or more firms that are objectively similarly situated. In such cases, the Department will determine the likely scale of entry, using either the firm's own documents or the minimum efficient scale in the industry. The Department will then evaluate the merger much as it would a horizontal merger between a firm the size of the likely scale of entry and the acquired firm.

d) The Market Share of the Acquired Firm. Entry through the acquisition of a relatively small firm in the market may have a competitive effect comparable to new entry. Small firms frequently play peripheral roles in collusive interactions, and the particular advantages of the

⁴²For example, the firm already may have moved beyond the stage of consideration and have made significant investments demonstrating an actual decision to enter.

acquiring firm may convert a fringe firm into a significant factor in the market.⁴³ The Department is unlikely to challenge a potential competition merger when the acquired firm has a market share of five percent or less. Other things being equal, the Department is increasingly likely to challenge a merger as the market share of the acquired firm increases above that threshold. The Department is likely to challenge any merger satisfying the other conditions in which the acquired firm has a market share of 20 percent or more.

B. Competitive Problems from Vertical Mergers

1. Barriers to Entry from Vertical Mergers

In certain circumstances, the vertical integration resulting from vertical mergers could create competitively objectionable barriers to entry. Stated generally, three conditions are necessary (but not sufficient) for this problem to exist. First, the degree of vertical integration between the two markets must be so extensive that entrants to one market (the "primary market") also would have to enter the other market (the "secondary market")⁴⁴ simultaneously. Second, the requirement of entry at the secondary level must make entry at the primary level significantly more difficult and less likely to occur. Finally, the structure and other characteristics of the primary market must be otherwise so conducive to non-competitive performance that the increased difficulty of entry is likely to affect its performance. The following standards state the criteria by which the Department will determine whether these conditions are satisfied.

⁴³Although a similar effect is possible with the acquisition of larger firms there is an increased danger that the acquiring firm will choose to acquiesce in monopolization or collusion because of the enhanced profits that would result from its own disappearance from the edge of the market.

⁴⁴This competitive problem could result from either up stream or downstream integration, and could affect competition an either the upstream market or the downstream market. In the text, the term "primary market" refers to the market in which the competitive concerns are being considered, and the term "secondary market" refers to the adjacent market.

- a. Need for Two-Level Entry. If there is sufficient unintegrated capacity⁴⁵ in the secondary market, new entrants to the primary market would not have to enter both markets simultaneously. The Department is unlikely to challenge a merger on this ground where post-merger sales (purchases) by unintegrated firms in the secondary market would be sufficient to service two minimum-efficient-scale plants in the primary market. When the other conditions are satisfied, the Department is increasingly likely to challenge a merger as the unintegrated capacity declines below this level.
- b. <u>Increased Difficulty of Simultaneous Entry to Both Markets</u>. The relevant question is whether the need for simultaneous entry to the secondary market gives rise to a substantial incremental difficulty as compared to entry into the primary market alone. If entry at the secondary level is easy in absolute terms, the requirement of simultaneous entry to that market is unlikely adversely to affect entry to the primary market. Whatever the difficulties of entry into the primary market may be, the Department is unlikely to challenge a merger on this ground if new entry into the secondary market can be accomplished under the conditions stated in Section III(B).⁴⁶ When entry is not possible under those conditions, the Department is increasingly concerned about vertical mergers as the difficulty of entering the secondary market increases. The Department, however, will

⁴⁵Ownership integration does not necessarily mandate two-level entry by new entrants to the primary market. Such entry is most likely to be necessary where the primary and secondary markets are completely integrated by ownership and each firm in the primary market uses all of the capacity of its associated firm in the secondary market. In many cases of ownership integration, however, the functional fit between vertically integrated firms is not perfect, and an outside market exists for the sales (purchases) of the firms in the secondary market. If that market is sufficiently large and diverse, new entrants to the primary market may be able to participate without simultaneous entry to the secondary market. In considering the adequacy of this alternative, the Department will consider the likelihood of predatory price or supply "squeezes" by the integrated firms against their unintegrated rivals.

⁴⁶Entry into the secondary market may be greatly facilitated in that an assured supplier (customer) is provided by the primary market entry.

invoke this theory only where the need for secondary market entry significantly increases the costs (which may take the form of risks) of primary market entry.

- i) Increased Cost of Capital as a Barrier to Entry. More capital is necessary to enter two markets than to enter one. Standing alone, however, this additional capital requirement does not constitute a barrier to entry to the primary market. If the necessary funds were available at a cost commensurate with the level of risk in the secondary market, there would be no adverse effect. In some cases, however, lenders may doubt that would-be entrants to the primary market have the necessary skills and knowledge to succeed in the secondary market and, therefore, in the primary market. In order to compensate for this risk of failure, lenders might charge a higher rate for the necessary capital. This problem becomes increasingly significant as a higher percentage of the capital assets in the secondary market are long-lived and specialized to that market and, therefore, difficult to recover in the event of failure. In evaluating the likelihood of increased barriers to entry resulting from increased cost of capital, therefore, the Department will consider both the degree of similarity in the essential skills in the primary and secondary markets and the degree of specialization of the capital assets in the secondary market.
- ii) Economies of Scale as a Barrier to Entry. Economies of scale in the secondary market may constitute an additional barrier to entry to the primary market in some situations requiring two-level entry. The problem could arise if the capacities of minimum-efficient-scale plants in the primary and secondary markets differ significantly. For example, if the capacity of a minimum-efficient-scale plant in the secondary market were significantly greater than the needs of a minimum-efficient-scale plant in the primary market, entrants would have to choose between inefficient operation at the secondary level (because of operating an efficient plant at an inefficient output or because of operating an inefficiently small plant) or a larger than necessary scale at the primary level. Either of these effects could cause a significant increase in the operating costs of the entering firm.⁴⁷

⁴⁷It Is important to note, however, that this problem would not exist if a significant outside market exists at the secondary level. In that case, entrants could enter with the appropriately

c. Structure and Performance of the Primary Market. Barriers to entry are unlikely to affect performance if the structure of the primary market is otherwise not conducive to monopolization or collusion.⁴⁸ The Department is unlikely to challenge a merger on this around unless overall concentration of the primary market is above 1800 HHI (a somewhat lower concentration will suffice if one or more of the factors discussed in Section III(C) indicate that effective collusion is particularly likely). Above that threshold, the Department is increasingly likely to challenge a merger that meets the other criteria set forth above as the concentration increases.⁴⁹

2. Facilitating Collusion Through Vertical Mergers.

a. <u>Vertical Integration to the Retail Level</u>. A high level of vertical integration by upstream firms into the associated retail market may facilitate collusion in the upstream market by making it easier to monitor price. Retail prices are generally more visible than prices in upstream markets, and vertical mergers may increase the level of vertical integration to the point at which the monitoring effect becomes significant. Adverse competitive consequences are unlikely unless the upstream market is generally conducive to collusion and a large percentage of the products produced there are sold through vertically integrated retail outlets.

The Department is unlikely to challenge a merger, on this ground unless I) overall concentration of the upstream market is above 1800 HHI (a somewhat lower concentration will suffice if one or more of the factors discussed in Section III (C) above indicate that effective

scaled plants at both levels, and sell or buy in market as necessary.

⁴⁸For example, a market with 100 firms of equal size would perform competitively despite a significant increase in entry barriers.

⁴⁹Even if all the conditions above are satisfied, the Department may not challenge a particular merger. The likelihood of significant competitive harm is lower than it is for horizontal mergers identified as competitively objectionable under the standards in Section III, and the extensive pattern of use integration, which is a necessary condition to the competitive problem under discussion, may constitute evidence that substantial economies are afforded by vertical integration. When such economies are present, it might be economically perverse and inequitable to the remaining independent firms to deny them the ability to integrate through merger.

collusion is particularly likely), and ii) a large percentage of the upstream product would be sold through vertically-integrated retail outlets after the merger. Where the stated thresholds are met or exceeded, the Department's decision whether to challenge a merger on this ground will depend upon an individual evaluation of its likely competitive effect.⁵⁰

b. Elimination of a Disruptive Buyer. The elimination by vertical merger of a particularly disruptive buyer in a downstream market may facilitate collusion in the upstream market. If upstream firms view sales to a particular buyer as sufficiently important, they may deviate from the terms of a collusive agreement in an effort to secure that business, thereby disrupting the operation of the agreement. The merger of such a buyer with an upstream firm may eliminate that rivalry, making it easier for the upstream firms to collude effectively. Adverse competitive consequences are unlikely unless the upstream market is generally conducive to collusion and the disruptive firm is significantly more attractive to sellers than the other firms in its market.

The Department is unlikely to challenge a merger on this ground unless i) overall concentration of the upstream market is 1800 HHI or above (a somewhat lower concentration will suffice if one or more of the factors discussed in III(C) above indicate that effective collusion is particularly likely), and ii) the allegedly disruptive firm differs substantially in volume of purchases or other relevant characteristics from the other firms in its market. Where the stated thresholds are met or exceeded, the Department's decision whether to challenge a merger on this ground will depend upon an individual evaluation of its likely competitive effect.

3. Evasion of Rate Regulation

Non-horizontal mergers may be used by monopoly public utilities subject to rate regulation as a tool for circumventing that regulation. The clearest example is the acquisition by a regulated utility of a supplier of its fixed or variable inputs. After the merger, the utility would be selling to itself and might be able arbitrarily to inflate the prices of internal transactions. Regulators may have great

⁵⁰See note 49, above.

difficulty in policing these practices, particularly if there is no independent market for the product (or service) purchased from the affiliate. ⁵¹ As a result, inflated prices could be passed along to consumers as "legitimate" costs. In extreme cases, the regulated firm may effectively preempt the adjacent market, perhaps for the purpose of suppressing observable market transactions, and may distort resource allocation in that adjacent market as well as in the regulated market. In such cases, however, the Department recognizes that genuine economies of integration may be involved. The Department will consider challenging mergers that create substantial opportunities for such abuses. ⁵²

V. DEFENSES

A. Efficiencies

In the overwhelming majority of cases, the Guidelines will allow firms to achieve available efficiencies through mergers without interference from the Department. Except in extraordinary cases, the Department will not consider a claim of specific efficiencies as a mitigating factor for a merger that would otherwise be challenged.⁵³ Plausible efficiencies are far easier to allege than to prove. Moreover, even if the existence of efficiencies were clear, their magnitudes would be extremely difficult to determine.

⁵¹A less severe, but nevertheless serious, problem can arise when a regulated utility acquires a firm that is not vertically related. The use of common facilities and managers may create an insoluble cost allocation problem and provide the opportunity to charge utility customers for non-utility costs, consequently distorting resource allocation in the adjacent as well as the regulated market.

⁵²Where a regulatory agency has the responsibility for approving such mergers, the Department will express its concerns to that agency in its role as competition advocate.

⁵³At a minimum, the Department will require clear and convincing evidence that the merger will produce substantial cost savings resulting from the realization of scale economies, integration of production facilities, or multi-plant operations which are already enjoyed by one or more firms in the industry and that equivalent results could not be achieved within a comparable period of time through internal expansion or through a merger that threatened less competitive harm. In any event, the Department will consider such efficiencies only in resolving otherwise close cases.

B. Failing Firm

The "failing firm defense" is a long-established, but ambiguous,⁵⁴ doctrine under which an anticompetitive merger may be allowed because one of the merging firms is "failing." Because the defense can immunize significantly anticompetitive mergers, the Department will construe its elements strictly.

The Department is unlikely to challenge an anticompetitive merger in which one of the merging firms is allegedly failing when: 1) the allegedly failing firm probably would be unable to meet its financial obligations in the near future and 2) it probably would not be able to reorganize successfully under Chapter 11 of the Bankruptcy Act,⁵⁵ and 3) it has made unsuccessful good faith efforts to elicit reasonable alternative offers of acquisition of the failing firm⁵⁶ that would both keep it in the market and pose a less severe danger to competition than does the proposed merger. Although these standards are far more difficult to apply when the allegedly failing firm is an unincorporated part of a larger parent firm, the Department will recognize the defense in appropriate cases of that type.⁵⁷

⁵⁴Although its original basis is open to question, the defense is sometimes explained as a balancing of competitive and non-competitive concerns. Under that view, when the elements of the defense are satisfied, there is a conclusive presumption that the anticompetitive dangers associated with the merger are outweighed by the income losses to creditors, stockholders, and communities associated with the failure of the firm. As a general matter, the Department views the incorporation of non-competitive concerns into antitrust analysis as inconsistent with the mandate contained in the antitrust laws. To the extent that the financial health of the firm is relevant to the competitive analysis, the Department, of course, will consider it in that context.

⁵⁵ 11 U.S.C.A. § § 1101 <u>et seq</u>. (1979).

⁵⁶The fact that an offer is less than the proposed transaction does not make it unreasonable.

⁵⁷The Department is unlikely to challenge an otherwise anticompetitive merger in which one of the merging firms is a financially healthy subdivision of an allegedly failing parent firm when: 1) the parent firm satisfies the above conditions, and 2) the competitive harm from the disappearance of the parent firm from its market would substantially outweigh the competitive harm threatened by the merger, 3) the proposed transaction probably would enable the parent firm

to avoid bankruptcy or to reorganize successfully, 4) the third condition stated in the text also has been satisfied with respect to the healthy subdivision, and 5) the merging firm is not capable of independent existence as a business entity. Where the merging firm is capable of independent existence, the Division may insist that the parent company attempt to transfer common stock in it to the parent company's creditors.