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## A Suggested Revision of the 2020 Vertical Merger Guidelines (Version: 31 December 2021)


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# **A SUGGESTED REVISION OF THE 2020 VERTICAL MERGER GUIDELINES (Version: 31 December 2021)**

**Steven C. Salop**

## **ABSTRACT**

The DOJ/ FTC Vertical Merger Guidelines (VMGs) were adopted by the FTC in June 2020 by a party-line 3-2 party line over the dissent of the Acting Chair. They were withdrawn by the FTC in September 2021. Withdrawal was appropriate because the VMGs are both incomplete and overly permissible. Revision is necessary. This Suggested Revision can aid that process.

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## **INTRODUCTION**

The DOJ/ FTC Vertical Merger Guidelines (VMGs) were adopted by the FTC in June 2020 by a party-line 3-2 party line over the dissent of the Acting Chair. The VMGs were withdrawn in September 2021. Withdrawal was appropriate because the VMGs are both incomplete and overly permissive.<sup>1</sup> Revision is necessary. The goal of this Suggested Revision is to aid that revision process.

The current VMGs contain specific language that would stand in the way of effective enforcement in court.<sup>2</sup> However, the problems with the current VMGs cannot be corrected simply by changing some words here and there. It is necessary to begin with a clean sheet, which is the approach taken here. This Revision has been formulated with an eye towards the problems with the current VMGs and to provide a clear contrast with that approach.

These Revised VMGs include descriptions of a greater range of anticompetitive concerns than are included in the 2020 VMGs and additional examples to clarify the concepts for practitioners and the business community. These Revised VMGs take a more rigorous approach to the parties' required burden to establish pass-on of elimination of double marginalization. Pass on of EDM should not be taken as automatic, just as other efficiencies required evidence of cognizability. These Revised VMGs also include a number of proposed anticompetitive presumptions to address vertical mergers that lead to heightened anticompetitive concerns.

These Suggested VMGs are intended to lead to more enforcement than has occurred in the past or is signaled by the 2020 VMGs. These revisions are based on the modern theoretical and empirical economic evidence.<sup>3</sup> This includes the fact that including concerns that common statistical tests

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\* Professor of Economics & Law, Georgetown University Law Center. I have benefited from the insights of and discussions with my multiple co-authors of vertical merger articles, Jonathan Baker, Daniel Culley, Gene Kimmelman, Serge Moresi, Nancy Rose, and Fiona Scott Morton, along with additional helpful discussions with Carl Shapiro and Jonathan Sallet. I have consulted for various parties on vertical mergers. However, the views expressed here are my own and may not be shared by either those companies, my GULC and CRA colleagues, or my various co-authors.

<sup>1</sup> Steven C. Salop, *The FTC Was Correct to Withdraw the Vertical Merger Guidelines*, PROMARKET (November 22, 2021), <https://promarket.org/2021/11/22/ftc-vertical-merger-guidelines-economics-withdrawn-lina-khan-salop/>

<sup>2</sup> See e.g., Steven C. Salop *Getting Your Deal Done Under the Vertical Merger Guidelines*, ANTITRUST SOURCE (October 2020).

<sup>3</sup> See e.g., Yongmin Chen, *On Vertical Mergers and Their Competitive Effects*, 32 RAND J. ECON. 667, 668 (2001); Volker Nocke & Lucy White, *Do Vertical Mergers Facilitate Upstream Collusion?*, 97 AMERICAN ECON. REV. 1321 (2007); Michael H. Riordan, *Competitive Effects of Vertical Integration*, in HANDBOOK OF ANTITRUST ECONOMICS 145 (Paolo Buccirossi ed., 2008); Hans-Theo Normann, *Vertical Integration, Raising Rivals' Costs and Upstream*

applied to econometric evidence are focused solely on avoiding false positive (Type I errors) and do not place weight on avoiding false negatives (Type II errors).<sup>4</sup> At the same time, these Revised VMGs are intended to be sensitive to conservative concerns about over-enforcement that this author does not share.

My hope is that these Suggested VMGs will be helpful to the drafters of revised VMGs. In addition, this version might serve as a useful substitute for practitioners evaluating proposed vertical mergers during the interim.

The Suggested VMGs follow.

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*Collusion*, 53 EUROPEAN ECON. REV. 461 (2009); Serge Moresi & Steven C. Salop, *vGUPPI: Scoring Unilateral Pricing Incentives in Vertical Mergers*, 79 ANTITRUST L.J. 185 (2013); Markus Reisinger & Emanuele Tarantino, *Vertical Integration, Foreclosure, and Productive Efficiency*, 46 RAND J. ECON. 461 (2015); Jonathan B. Baker, *Taking the Error Out of “Error Cost” Analysis: What’s Wrong with Antitrust’s Right*, 80 ANTITRUST L.J. 1 (2015); Steven C. Salop, *Invigorating Vertical Merger Enforcement*, 127 YALE L.J. 1962 (2018); Gregory S. Crawford, Robin S. Lee, Michael D. Whinston & Ali Yurukoglu, *The Welfare Effects of Vertical Integration in Multichannel Television Markets*, 86 ECONOMETRICA, 891(2018). Jonathan B. Baker, Nancy L. Rose, Steven C. Salop & Fiona Scott Morton, *Five Principles for Vertical Merger Enforcement Policy*, ANTITRUST, (Summer 2019); Steven C. Salop, *Analyzing Vertical Mergers to Avoid False Negatives: Three Recent Case Studies*, ANTITRUST, (Summer 2019); John Kwoka & Margaret Slade, *Second Thoughts on Double Marginalization*, 34 ANTITRUST 51 (2020); Gopal Das Varma & Martino De Stefano, *Equilibrium Analysis of Vertical Mergers*, 65 ANTITRUST BULLETIN 455 (2020); Marissa Beck & Fiona Scott Morton, *Evaluating the Evidence on Vertical Mergers*, Rev. Ind. Org. (2021)(forthcoming); Serge Moresi and Steven C. Salop, *When Vertical is Horizontal: How Vertical Mergers Lead to Increases in “Effective Concentration,”* REV. IND. ORG. (2021) (forthcoming). See also the references cited in these various articles.

<sup>4</sup> Phillip Johnson, Edward Leamer & Jeffrey Leitzinger, *Statistical Significance and Statistical Error in Antitrust Analysis*, 81 ANTITRUST L.J. 641 (2017); Ronald L. Wasserstein & Nicole A. Lazar, *The ASA Statement on p-Values: Context, Process, and Purpose*, 70 AM. STATISTICIAN 129 (2016).

# **SUGGESTED VERTICAL MERGER GUIDELINES**

## **(Version: 31 December 2021)**

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### **1. OVERVIEW**

These Guidelines outline the principal analytical techniques, practices and enforcement policy of the Department of Justice and the Federal Trade Commission (the “Agencies”) with respect to vertical and

complementary product mergers and acquisitions under the federal antitrust laws.<sup>5</sup> 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 vertical merger context.<sup>6</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,” which encompasses a concept of “reasonable probability” or “appreciable risk” of these effects. This provision applies to all mergers, as Congress made plain in the 1950 amendments to the Clayton Act.

These Guidelines focus on the competitive harms and competitive benefits that may result from these mergers. A vertical or complementary product merger can lead to competitive harms from either unilateral or coordinated conduct. Potential anticompetitive conduct includes various forms of foreclosure, reduction or elimination of potential competition, misuse of competitively sensitive information, reduced incentives of the merging firm to disrupt upstream coordination, weakening mavericks or disruptive competitors, and evasion of regulation or long-term private contracts. This conduct can harm consumers by raising prices, reducing quality or variety, raising entry barriers or reducing innovation, or harm workers by reducing the returns on their labor and their opportunities. A merger also may lead to competitive benefits by increasing technological efficiency, eliminating efficiencies and passing-on elimination of double marginalization. Potential procompetitive effects include lower prices, improved products, greater product variety, cost reductions, and increased investment and innovation. While these Guidelines generally use the term price in discussing the competitive behavior and effects, the same analysis also applies to non-price conduct and effects, which may be important in various vertical mergers.

Vertical mergers combine firms or assets that operate at different stages of production or distribution. Examples of vertical mergers include: a manufacturer acquiring one of the firms that supplies it with parts; a manufacturer acquiring one of its distributors; or a retail chain buying the manufacturer of one of the products that it sells. These Guidelines address complementary product mergers as well as vertical mergers because both types of mergers raise similar competitive harms and benefits. Complementary products are ones that are used together. Examples are an operating system and applications that run on it, French fries and ketchup, or an individual-serving coffee machine and the pods that are used in the machine. The economic distinction between vertical and complementary product mergers may be ephemeral. For example, suppose a smartphone operating system provider acquires a license to an application. If the smartphone operating system provider pays per-unit royalties to the application, and then resells the application to buyers, the acquisition of the application by the operating system provider

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<sup>5</sup> These Guidelines replace the agencies' Vertical Merger Guidelines issued on June 30, 2020, which are now withdrawn and superseded in their entirety.

<sup>6</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.

would present as vertical. But it would present as complementary if the application owner sells directly to users and does its own billing.<sup>7</sup> These Guidelines also apply to merger transactions by vertically integrated firms, which can involve both vertical and horizontal elements, and that also may lead to vertical and horizontal harms that reinforce each other. Some acquisitions may be both vertical and horizontal, as when a vertically integrated firm acquires a firm at either level, or when a firm in one market acquires a nascent competitor in a complementary product or vertically related market that was contemplating entry into the market where the acquiring firm competes.

These Guidelines should be read in conjunction with the Horizontal Merger Guidelines.<sup>8</sup> While a merger may be vertical, its ultimate potential anticompetitive effects are the same as those that arise from horizontal mergers. The principles and analytical frameworks used to assess horizontal mergers the Horizontal Merger Guidelines also apply to vertical mergers.

## **2. MARKET DEFINITION AND RELATED PRODUCTS**

In any merger enforcement action involving a vertical or complementary product merger, the Agencies will normally identify one or more relevant markets in which the merger may substantially lessen competition. The general purposes and limitations of market definition described in Section 4 of the Horizontal Merger Guidelines are also relevant when the Agencies define markets for vertical mergers, and the Agencies use the methodology set forth in Sections 4.1 and 4.2 of the Horizontal Merger Guidelines to define relevant markets for vertical mergers. However, as explained in the Horizontal Merger Guidelines, 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.”

Several issues may arise more commonly in market definition analysis for vertical mergers. First, the merged firm or other competitors already may be vertically integrated. Second, the current price may be supracompetitive and the competitive concern may be that the vertical merger will prevent prices from falling, by reducing the likelihood of increased competition. In this situation, the current, pre-merger price is not the appropriate price benchmark for the hypothetical monopolist test. A lower price resulting from increased competition would be the appropriate benchmark, similar to the treatment of horizontal mergers when there is pre-merger coordination. Third, a merger also may raise concerns in multiple relevant markets. In addition, the Agencies also may rely on direct evidence for defining markets and determining market power.

While the relevant market is the market in which the anticompetitive effects occur, the The Agencies also may identify one or more related products or services that are supplied by the merged firm and are vertically related or complementary to the products and services in the relevant market, and for which access by the merged firm’s rivals affects competition in the relevant market. In the case of input foreclosure, a related product could be an input sold to downstream rival firms. In the case of customer

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<sup>7</sup> Most of the examples refer to “vertical” mergers, but the analysis also applies to complementary product mergers.

<sup>8</sup> U.S. Dep’t of Justice & Fed. Trade Comm’n, Horizontal Merger Guidelines (2010).

foreclosure, a related product could be the sale of the downstream product. A related product segment for one competitive concern may be the relevant product market (or part of that market) for another concern.

*Example 1: A retail supermarket chain buys a candy manufacturer. If the competitive concern is input foreclosure resulting from the merging manufacturer refusing to sell its candy products to competing retail chains, or coordination among the retailers, the relevant market is the downstream sale of candy to retail buyers in a particular geographic area, and the related product segment is the wholesale supply of the candy to some or all of the rival supermarkets in the geographic area. If the competitive concern is customer foreclosure or coordination by the candy manufacturers, the relevant market is the wholesale supply of candy to supermarkets, and the related product segment is the retail sale of candy in the particular geographic area.*

The related product segment used to analyze the competitive effects of a vertical merger may or may not be a relevant market that would be used to analyze competitive issues involving the related product. For example, if the related product segment is used for determining harm only to the competitors potentially targeted for foreclosure, it need not be identical to the typical relevant market defined for a horizontal merger between two upstream firms and, in particular, could be narrower.<sup>9</sup>

*Example 2: Company A is one of five producers of catalysts used to produce a specialty chemical product for a manufacturing process. Manufacturer X is one of five competing specialty chemical manufacturers which use the catalyst in producing differentiated substitutes. There are two distinct catalyst formulations, F1 and F2. The production process of Manufacturers X and Y requires the use of F1, which is produced only by Companies A and B under their separate patents. The other three manufacturers require the use of F2, produced only by the other three catalyst companies under their separate patents. Analysis of a horizontal merger between Companies A and B may define a narrow “targeted customer” market limited to Catalyst F1 because Manufacturers X and Y are locked-in to catalyst F1, even if the downstream market is comprised of the products of all five manufacturers. In analyzing input foreclosure concerns from a vertical merger between Company A and Manufacturer X, the related product segment similarly could be the sale of catalyst F1 of Manufacturers X and Y. Moreover, even if a small price increase by a hypothetical monopolist that owned only Companies A and B would be unprofitable, or if the Agencies defined an all-catalyst market for a horizontal merger analysis for another reason, input foreclosure by Company A directed at Manufacturer Y nonetheless might still be profitable for the merged firm because it would gain downstream profits as a result, which could lead to a related product segment limited only to catalyst F1 sold to Company B.*

### **3. MARKET PARTICIPANTS, SHARES AND CONCENTRATION**

The Agencies may consider measures of share and market concentration in the relevant market and related product segment as part of their evaluation of competitive effects. The Agencies evaluate market (and product segment) shares and concentration in conjunction with other reasonably available and reliable

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<sup>9</sup> In the case of customer foreclosure, a related product segment could be the customers for whom potentially foreclosed suppliers compete to sell.



evidence for the ultimate purpose of determining whether a merger has a reasonable probability of substantially lessening competition. The Agencies use the methodology set out in Sections 5.1, 5.2 and 5.3 of the Horizontal Merger Guidelines to measure shares and concentration in the relevant markets and related product segments.

Competitive concerns from vertical mergers tend to be greater when one or both of the levels are concentrated and are particularly heightened when one of the merging firms is dominant in one or both levels. Competitive concerns tend to be significantly lessened when both levels are unconcentrated.<sup>10</sup> As illustrated in the examples, significant competitive concerns can arise even when the market share of one or both merging parties is low, or one or both of the levels are unconcentrated. A merger also may not raise significant competitive concerns even if both levels are concentrated, or one of the merging firms has substantial market power.

For expositional convenience, these Guidelines describe the analytical framework and enforcement policy under the assumption that a lessening of competition from a vertical merger would harm buyers. In addition to that possibility, vertical mergers can lead to the exercise of buyer-side market (monopsony) power that harm input sellers. That could occur, for example, if the upstream merging firm is a disruptive competitor on the buy-side, preventing the upstream firms from coordinating to depress input prices (or wages) paid to their suppliers further upstream. It could also occur if the downstream affiliate is a disruptive buy-side competitor, preventing the downstream firms from coordinating to depress input prices from the upstream firms. If the merged firm has a different incentive than the standalone firms, the acquisition could harm competition on the buy-side. The Agencies will analyze and evaluate harm to sellers from a vertical merger analogously to the way they analyze and evaluate harm to buyers.

#### **4. HARMS FROM UNILATERAL EFFECTS**

A vertical merger may diminish competition and harm buyers from unilateral conduct by changing the unilateral incentives of the merging firms. A merger that raises foreclosure concerns also may be accompanied by cognizable efficiencies, including elimination of double marginalization, as analyzed in Section 7.

##### **4.1. FORECLOSURE**

A vertical merger may diminish competition by giving the merged firm the ability and incentive to weaken or remove the competitive constraint of one or more of its actual or potential rivals in the relevant market by changing the terms of those rivals' access to one or more related products. Foreclosure may involve access to inputs ("input foreclosure") or customers ("customer foreclosure"). In discussing foreclosure, it is common to refer to the input market as upstream and the output market as downstream.<sup>11</sup> Input foreclosure can involve the merged firm totally withholding access to its input, raising its rivals' costs by increasing the price it charges, or otherwise disadvantaging rivals by worsening their access to the inputs produced by the upstream merging firm. Customer foreclosure involves the merged firm reducing its

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<sup>10</sup> See Section 6.1 of the Horizontal Merger Guidelines ("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.")

<sup>11</sup> Depending the particular competitive concerns and structure being analyzed, distributors may be treated either as (i) downstream customers of manufacturers or (ii) suppliers of an upstream distribution services input to manufacturers.

rivals' revenues or raising their costs by worsening their ability to sell inputs to the merged firm. A vertical merger may create incentives for both customer and input foreclosure, which may reinforce one another. Where the concern is unilateral foreclosure conduct, the Agencies normally will focus on the competitive harms suffered in the relevant market by the customers of the downstream firms, not simply harm to the foreclosed competitors).<sup>12</sup>

#### 4.1.1. INPUT FORECLOSURE

A vertical merger may diminish competition in the downstream relevant market by giving the merged firm the ability and incentive to foreclose one or more rivals in that market. Foreclosure includes materially raising their costs or otherwise disadvantaging them, either by raising the input prices or reducing the quality of the input provided ("raising rivals' costs), or totally denying them access to the input ("total foreclosure"). These Guidelines use the term *foreclosure* to include all these types of conduct. The fear of input foreclosure also may raise entry barriers. Foreclosure may harm the customers who purchase output from the merging firm, as well as its rivals in the downstream relevant market, by raising prices, reducing quality, or reducing or slowing innovation.

In identifying whether a vertical merger is likely to harm competition through input foreclosure, the Agencies will consider whether and to what degree (1) The foreclosure would cause foreclosed rivals to lose sales (e.g., if they are forced out of the market; or if they are deterred from innovating, entering or expanding, or being unable to finance these activities; or if they have incentives to pass on higher costs through higher prices or otherwise to compete less aggressively for customers' business); (2) The merged firm's business in the downstream relevant market would benefit as a result (e.g., if some portion of those lost sales would be diverted to the merged firm; or if the merged firm would gain the power to raise or maintain supra-competitive prices). In carrying out this analysis, the agencies will presume that the upstream and downstream divisions of the merged firms will act as a unitary entity and attempt to maximize their combined profits.<sup>13</sup>

For foreclosure to be profitable, the downstream affiliate does not need to gain a high market share since it can earn higher profits from the higher downstream prices resulting from rivals' having higher costs and raising their prices or shrinking their production. The profitability of the strategy will depend in part on how easily and inexpensively the foreclosed rivals can substitute inputs, considering the possible accommodating price increases by other upstream firms, how much sales the downstream affiliate would gain, and the incremental profits the downstream firm would earn on those sales diverted from downstream rivals or would earn by raising its price. Profitability could be mitigated or prevented by increased output by non-foreclosed competitors, entry or repositioning.

*Example 3: Company A is a manufacturer and wholesale supplier of orange juice to retailers. It seeks to acquire Company B, an owner of orange orchards. The Agencies*

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<sup>12</sup> Foreclosure conduct also may be coordinated, as discussed in Section 5.4.

<sup>13</sup> Merging parties sometimes argue their business strategy is to maximize profits of the upstream division and so would lack incentives to foreclose. If the evidence indicates a profit-maximizing economic incentive to foreclose, such claims assume that the integrated firm will behave in an economically irrational way that does not serve shareholder interests. In analyzing such claims, the Agencies also will account for the fact that foreclosure threats in negotiations do not lead to lower upstream sales or profits, as discussed in Section 4.1.2. The Agencies also will analyze the impact of a foreclosure strategy on possible increased input purchases by the downstream merging firm, and degree of profit sacrifice that failure to foreclose would impose on the shareholders of the merged firm.

*may consider whether the merger would lessen competition in the manufacture and wholesale supply of orange juice in region X, which is the relevant (output) market. The merged firm may find it profitable to raise the price or cease supplying oranges to one or more rival orange juice suppliers. The supply of oranges to the downstream rivals is the related (input) product segment. This input foreclosure may lessen competition in the wholesale orange juice market, for example, by raising the price or reducing the quality of some or all types of orange juice.*

The incentives for anticompetitive input foreclosure are lessened if the input is less critical to the potentially foreclosed firms and if those firms have available numerous cost-effective substitutes whose prices will not increase materially if foreclosure occurs. Accordingly, the incentives for anticompetitive input foreclosure are limited if the numerous substitute inputs are not significantly differentiated and upstream entry is easy. For these conditions, the rivals' costs are less likely to be materially increased by foreclosure.

The competitive concern is strengthened if the non-merging input suppliers which provide the closest substitutes are more likely to accommodate the price increase of the merging firm by raising their own prices in response, for example, when the non-merging input suppliers sell differentiated products or have rising marginal costs, or where there are fewer or more concentrated input suppliers. If other upstream firms also raise their prices in response, this response will lead to a larger increase in costs borne by the foreclosed downstream firms. The competitive concern also is greater if the foreclosure can profitably target multiple competitors of the downstream merging firm because that would lead to greater diversion to the merging firm. For these reasons, competitive concerns about input foreclosure are particularly heightened if the upstream merging firm is a substantial supplier of a critical or significant input to multiple competitors of the other merging firm, where upstream supply is concentrated and where a decision to stop dealing with those downstream competitors would lead to substantial diversion of business to the downstream affiliate of the merged firm.

Input foreclosure may be profitable and harm buyers even if the merging firms have only modest market shares and the downstream relevant market is unconcentrated. This may occur when supply by the upstream merging firm is critical or the upstream product segment is concentrated or there is substantial differentiation.

*Example 4: Company A is one of the two manufacturers of patented mechanisms to control convertible tops in automobiles. Company A has a market share of just under 20% and Company B has a market share of just over 80%. The two competing mechanisms are very close substitutes and intense competition leads their pre-merger prices to be very close to marginal cost. The companies sell their equipment to eight automobile manufacturers, each of which has a market share in the 10-20% range. After acquiring Manufacturer X, the merged firm substantially raises the price of its mechanisms to all the other automobile manufacturers (though not to Manufacturer X), and the competing mechanism firm raises its prices in response. As a result, of rivals having higher costs and facing upward pricing pressure, there would be substantial diversion to Manufacturer X at its current price. The end result would be higher convertible automobile prices. Although Company A may lose substantial mechanism sales, the increase in the sales and price of Manufacturer X may increase the profits of*

*the merged firm.*

Input foreclosure also may be profitable if the upstream supply level (i.e., the related product level) is unconcentrated.

*Example 5: Company A is one of ten equal-sized producers of catalysts used to produce a specialty chemical product. Manufacturer X is one of ten competing equal-sized specialty chemical manufacturers which use a catalyst in producing differentiated substitutes. There are two distinct catalyst formulations, F1 and F2. The production process of Manufacturers X and Y requires the use of F1, which is produced only by Companies A and B under separate patents. The F1 catalysts produced by Companies A and B are very close substitutes and earn very low margins as a result. The other eight manufacturers require the use of F2 catalysts which are produced only by the other eight catalyst companies under separate patents. After a vertical merger between Company A and Manufacturer X, Company A substantially raises its price or stops selling to Manufacturer Y, which leads Company B to raise its price in response. Total foreclosure of Manufacturer Y is profitable for the merged firm, because Manufacturer Y's costs are raised and Manufacturer X gains substantial sales from Manufacturer Y that are sufficient to offset the reduced profits of Company A.*

Input foreclosure may not occur even if the downstream market is concentrated and the downstream affiliate has a high market share.

*Example 6: Company A is one of the two manufacturers of patented mechanisms to control convertible tops in automobiles. Company A has a market share of 50%, as does Company B. There are three automobile manufacturers, each with similar shares. Company A sells only to Manufacturer X, whose equipment is incompatible with Company B's technology. Company B supplies only Manufacturers Y and Z, whose equipment is incompatible with Company A's technology. After acquiring Manufacturer X, the merged firm lacks the ability or incentive to raise the price of its mechanisms to the other automobile manufacturers, which have incompatible technologies. While this merger may lead to efficiency benefits, it would not lead to competitive harms from input foreclosure.*

Because a manufacturer needs distribution services to bring its products to market, it may be useful to treat distribution services as an input that is subject to input foreclosure concerns.

*Example 7: Company A is the owner of one of the competing facilities in Louisiana that extracts a valuable acidic liquid from refinery wastewater, which then is transported by pipeline to various destinations along the Mississippi River for use in specialty manufacturing factories. Pipelines B and C are the only two pipelines that purchase the liquid from the Louisiana producers and then transport it north for sale to end-user customers. The pipelines charge a toll for shipping liquid that continues to be owned by the extractors. An acquisition of Company A by Pipeline B raises the input foreclosure concern that Pipeline B might refuse to transport liquid owned by rival extractors, which could raise their cost of distribution because Pipeline C may raise its transportation toll price. If Pipeline A refuses to buy liquids from competing extractors,*

*those extractors would be vulnerable to Pipeline C paying less for the liquid it purchases, which would reduce their margins and have equivalent economic effects.<sup>14</sup> Either way, the merger may lead to competitive harm by raising the price of the liquid sold to the end-user customers.*

Input foreclosure also can occur from a complementary product merger.

*Example 8: Company A sells the leading computer operating system used by electricity utility customers, and Company B produces complementary applications for that operating system and others. After merging, the merged firm may begin to offer a bundle of the operating system and applications. This may harm competition in operating systems: the merged firm may charge a significantly higher price for the unbundled operating system, or it may refuse to sell the operating system on an unbundled basis, thereby raising the effective price of operating systems to electricity utilities that preferred different applications at the pre-merger prices. Company B also might slow its development of applications for other operating systems, which could permit Company A to gain market share and raise its price. Alternatively, or in addition, the merger might restrict competition in applications programs. It may lead Company A to withhold improved application interfaces and communication protocols from the rivals of Company B that it previously provided routinely to all the applications developers, thereby allowing Company B's applications to work faster and better than competing applications. As a result, the Company B division may gain sales at the expense of other applications. In this way, the merger of these complementary products may harm competition through input foreclosure in one or both complementary product markets.<sup>15</sup>*

When dominant platforms are protected from competition by network effects, economies of scale and switching costs, competitive concerns from their vertical acquisitions are particularly heightened because foreclosure may prevent creation of beneficial price, quality and innovation competition and because that foreclosure is likely to be profitable.

*Example 9: Company A provides the dominant internet-based dental product sales platform for connecting manufacturers of dental supplies and dentists to exchange information and interact in an online dental products marketplace. Company B is an important manufacturer of artificial teeth. After acquiring Company B, the merged firm plans to eliminate Company B's sales to traditional wholesalers and its participation on other online dental product platforms. It also plans to provide Company B with information on prices, sales and customers of its artificial teeth competitors. As a result, both Company A's platform and Company B's teeth may gain share from competitors and the ability to raise their prices. Innovation by rival tooth manufacturers and rival platforms also may decline.*

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<sup>14</sup> The failure to purchase also can be characterized as customer foreclosure, which in this case leads the competing pipeline to gain monopsony power over the other liquid extractors.

<sup>15</sup> If there is only competitive harm applied to the buyers of one of the complements, then that product is the relevant market and the other is the related product,

#### 4.1.2. INPUT FORECLOSURE IN NEGOTIATION MARKETS

Input foreclosure also can occur in negotiation markets by increasing the bargaining leverage of the upstream merging firm to negotiate higher prices with the rivals of the downstream merging firm. After the merger, the upstream affiliate and customers that are downstream rivals will recognize that the downstream affiliate will earn more if the upstream affiliate were to foreclose the downstream rivals from access to the input, even temporarily. That makes it less costly (and so less risky) than before the merger for the upstream affiliate to fail to reach an immediate agreement. In consequence, the merger will typically increase the bargaining leverage of the upstream affiliate, providing it with the ability to negotiate higher prices, and thereby also harm downstream competition by raising rivals' costs.

In this bargaining context, long term supply disruptions are not expected to occur, and even short-term disruptions may rarely occur, because the parties have mutual incentives to avoid them by reaching a quick agreement. Bargaining theory is premised on foreclosure threats, not necessarily carrying out the threats with actual foreclosure.<sup>16</sup> For the same reason, there will not be actual profit sacrifice by upstream division from these threats.

*Example 10: Company A supplies critical equipment to aircraft Manufacturers B and C which compete in the sale of aircraft to airlines (the relevant market). Manufacturer B wishes to acquire Company A. When the merged firm bargains with rival Manufacturer C over the price of this equipment, Company A may be more willing to hold out for higher prices, as compared to when it was an unintegrated company. This is because losing (or delaying) sales of equipment to Manufacturer C may be less costly than it was for standalone Company A. Higher negotiated prices paid by Manufacturer C for this equipment may lead to higher aircraft prices.*

#### 4.1.3. CUSTOMER FORECLOSURE

A vertical merger may diminish competition in an upstream relevant market by creating an incentive for the merged firm to foreclose one or more rival input suppliers (that participate with it in this relevant market) by reducing or eliminating its purchases from those suppliers. The competitive concern from customer foreclosure is not the loss of sales to the downstream merging firm but rather the subsequent impact that this foreclosure may have on competition for other downstream customers among the foreclosed upstream suppliers. In identifying whether a vertical merger is likely to harm competition through customer foreclosure, the Agencies will consider whether and to what degree: (1) the foreclosure would cause rival upstream suppliers to lose sales and exit the market, or face materially higher costs of production, or have materially reduced incentives to invest or innovate, or otherwise compete less aggressively for customers' business; and (2) the benefits to the upstream merging firm from gaining additional sales from other customers or gaining the power to raise or maintain supra-competitive prices. Competitive concerns are particularly heightened when a vertical merger involves a downstream affiliate that is a substantial purchaser of the input produced in a concentrated upstream market, and a downstream

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<sup>16</sup> Foreclosure occurs one period at a time, not permanently, and threatening a short-term delay that changes the likely allocation of the gains from trade in a favorable direction is credible. Even if the threat of a permanent or long-term foreclosure lacks credibility because it would be so costly for the merged firm, threats to delay the agreement for one more period could readily be credible because they become less costly after the merger and so can achieve the benefit of causing the buyer to be willing to accept a more favorable offer because of the costs the buyer would suffer from the delay.

merging firm's decision to stop dealing with the competitors of the upstream merging firms would lead to the exit, reduction in investment, or significantly higher marginal costs of one or more of those upstream competitors by diverting a substantial amount of business away from them.

*Example 11: Airline A is the largest airline that serves a particular hub city and it purchases jet fuel from three local oil refineries. After Airline A acquires Refinery X, it may stop purchasing from the other two refineries. The Agencies may consider whether the merger would lessen competition in the sale of jet fuel in the hub city, which is the relevant market. Air transportation provided by the airlines that serve the hub city is the related product segment. The loss of the fuel sales to Airline A may cause one or both of the two independent refineries to become markedly less efficient, leading one to stop producing any jet fuel. As a result, the acquired Refinery X and the other surviving jet fuel supplier, facing less competition, may find it profitable to raise the price of jet fuel to Airlines B and C that also serve the hub, thereby harming these airline purchasers, even if they do not compete with Airline A. As a result, air fares on routes using the hub also may rise.<sup>17</sup>*

Customer foreclosure also may lead to input foreclosure.

*Example 12: Given the facts of Example 11, the higher costs of competing Airlines B and C may lead them to raise their prices, reduce the frequency of their flights or withdraw from certain routes where they compete with the merging Airline A. The higher prices of jet fuel would represent input foreclosure as a result of the higher prices of jet fuel and may lead to diversion of passengers to Airline A. This diversion then may give Airline A the incentive to raise or maintain higher prices on its routes, thereby further harming air travelers on those routes. In evaluating this input foreclosure concern, air service on various routes from the hub city would be relevant markets and jet fuel would be the related product segment.*

#### **4.2. REDUCTION OR ELIMINATION OF POTENTIAL COMPETITION**

A vertical merger can reduce or eliminate potential competition and raise entry barriers in several ways. First, one or both merging firms may be potential entrants or potential sponsors of entry by third parties into the other merging firm's market. Such mergers can be characterized as horizontal as well as vertical.<sup>18</sup> Second, the acquisition of the producer of a vertically-related or complementary product can force other potential entrants to enter both markets simultaneously, which can raise the cost or risk of entry and thereby reduce the likelihood that the entry will occur or will provide as much competition if it does occur.

*Example 13: Manufacturer A produces industrial robots. Company B and Company C produce operating systems for industrial robots that they sell to Manufacturer A and its competitors (as well as non-competitors) at supra-competitive prices. Company A has been considering the possibility of creating its own operating system, which it also would sell to other robot makers. Company B acquires Manufacturer A, which*

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<sup>17</sup> These higher costs could raise prices both on routes served by Airline A and also on routes that it does not serve.

<sup>18</sup> The firms may be actual or perceived potential competitors.

*eliminates the threat of that operating system competition and allows Companies B and C to continue to charge high prices for their operating systems.<sup>19</sup> In this example, sale of operating systems is the relevant (product) market and the manufacture of robots is the related product.*

Competitive concerns are heightened when either (or both) merging firms have a substantial probability of entering into the other firm's highly concentrated market, or when one of the merging firms would be an anchor customer of potential entrants. When dominant platforms are protected from competition by network effects, economies of scale and switching costs, competitive concerns from their vertical acquisitions are particularly heightened because the acquisition may result in the loss of potential competition, not just because it threatens anticompetitive foreclosure. If a dominant platform acquires a potentially significant complement or vertically-related firm that is a potential or nascent competitor into its relevant market, or one that could facilitate the entry and growth of a fringe rival or potential rival into that market, the merger may prevent the disruption of its dominance and the substantial competitive and consumer benefits in terms of lower prices, increased quality and greater innovation that would follow successful entry.

#### **4.3. EXCLUSIONARY MISUSE OF COMPETITIVELY SENSITIVE INFORMATION**

In a vertical merger, the combined firm may gain access to sensitive business information about its upstream or downstream rivals that was unavailable to it before the merger. For example, a downstream rival of the merged firm may have been a pre-merger customer of the upstream firm. Post-merger, the downstream division of the merged firm could gain access to its rivals' sensitive business information. Access to a rival's competitively sensitive information can, in some circumstances, be used by the merged firm to intensify its competitive response to rivals' competitive actions. For example, it may preempt or react quickly to a rival's procompetitive business actions. While this more rapid response initially might benefit buyers, it is opportunistic free riding that may harm competition over time because rivals may obtain less value in taking procompetitive actions and will be deterred from doing so as a result. Relatedly, rivals may rationally refrain from doing business with the merged firm rather than risk that the merged firm would misuse their competitively sensitive business information in this way. They may do so even if it raises their costs, reduces their efficiency or leads them to pay higher prices because they have fewer competing options.<sup>20</sup>

*Example 14: Manufacturer A designs, produces and sells components used by Fabricators B, C, and D. Manufacturer A obtains advance information about the new products being developed by the fabricators. After merging with Fabricator B, Manufacturer A can use that information to allow Fabricator B can quickly imitate the new products of its competitors. If they lose their timing advantages, Fabricators C and D may have less incentive to innovate. Fearing this rapid imitation, Fabricators C and D alternatively may switch to different component producers, even if those components are lower quality or higher costs. Either way, the customers of the fabricators may be harmed,*

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<sup>19</sup> The merger also may lead to an additional incentive for input foreclosure targeted at Company A's competitors.

<sup>20</sup> The fact that it is the competitors that choose to refrain from doing business with the merged firm to avoid these feared harms does not eliminate the competitive concerns raised by the merger. This is a foreseeable and rational adverse outcome caused by the merger.



*from either higher prices or reduced innovation. In this example, fabrication is the relevant product market and manufacturing is the related product.*

#### **4.4. EVASION OF REGULATION OR LONG-TERM PRIVATE CONTRACTS**

A vertical merger may facilitate evasion of price regulation or the manipulation of long-term private contracts with input price escalators. Competitive concerns are particularly heightened where a downstream affiliate is subject to maximum price regulation that permits cost-based price increases costs, and where the upstream affiliate is able to increase the price of inputs provided to the downstream firm in ways the regulator cannot easily or rapidly detect, and as a result, would not lead the regulator to prevent higher downstream prices.<sup>21</sup>

In unregulated markets where the firms employ long-term contracts for input supply that include price escalation provisions that utilize market indices, a vertical merger might permit and provide an incentive for the upstream merging firm to take actions to raise the price escalator to raise the costs of the competitors of the downstream affiliate and thereby increase its profits at both levels.

*Example 15: Suppose that the long-term contracts for jet fuel between refineries and airlines contain a provision that sets the contract price in response to higher spot prices of jet fuel, as calculated and published in a respected trade publication. Suppose that after the merger of Airline A and Refinery X, Refinery X begins to make additional spot market purchases that raise the published spot price, and hence raise the contract price paid by competing Airlines B and C to Refinery X for their jet fuel. In this example, air travel is the relevant market. The fact that the conduct involves market manipulation may lead the Agencies alternatively to treat the sale of jet fuel as the relevant market.*

#### **5. HARMS FROM COORDINATED EFFECTS**

In some cases, a vertical merger may diminish competition by enabling or encouraging post-merger coordinated interaction that harms customers in the relevant market. Section 7 of the Horizontal Merger Guidelines describes how the Agencies evaluate coordinated effects. Section 7.1 notes that the Agencies are more likely to challenge a merger on the basis of coordinated effects when the relevant market shows signs of vulnerability to coordinated conduct, and the Agencies have a credible basis on which to conclude that the merger may enhance that vulnerability. Section 7.2 sets forth evidence relevant for evaluating whether a market is vulnerable to coordination. The theories of harm discussed in the Horizontal Merger Guidelines, as well as those discussed below, are not exhaustive, but rather are illustrations of the ways in which a merger may lessen competition from coordinated effects.

Anticompetitive coordinated effects from a vertical merger may involve weakening or elimination of a disruptive or maverick seller or buyer. Sensitive competitive information may be misused to facilitate coordination. Coordinated foreclosure also may occur if there are multiple vertically integrated firms. Coordination to raise prices in the upstream relevant market harms the direct purchasers and normally also would be expected to harm the customers of the downstream firms. However, if a merger may lead to a high likelihood of significant anticompetitive coordination, the Agencies may not

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<sup>21</sup> Equivalent issues arise if the merger combines firms that sell complementary products, the merged firm could evade price regulation by increasing the price of the bundle and attributing the price increase to the unregulated product.

require a showing of harms to these indirect purchasers but may focus primarily on the harm to the direct customers. The direct customers are the downstream firms in the case of upstream coordination; they are the upstream firms in the case of buyer-side coordination by the downstream firm.

### **5.1. WEAKENING A NON-MERGING DISRUPTIVE COMPETITOR**

A vertical merger may enhance the market's vulnerability to coordination by eliminating or hobbling a disruptive or maverick firm that otherwise plays an important role in preventing or limiting anticompetitive coordination in one of the relevant markets in which the merging firms participate. This may lead to competitive harm even if the recapture of the targeted firm's sales by the combined firm would be limited. For example, after the merger, the merged firm could have the incentive to use its power in the input (upstream) product segment for a significant input to raise the costs of a disruptive or maverick competitor in the downstream relevant market, thereby increasing the likelihood of coordinated interaction in that downstream market, which then could benefit its downstream division and also harm customers of the downstream firms.

Similarly, the merged firm may be able to use its power in the upstream relevant market to weaken the ability of a disruptive buyer of inputs to disrupt upstream coordination, thereby increasing the likelihood of coordinated interaction in the upstream relevant market.<sup>22</sup> For example, the upstream affiliate might attempt to lead the elimination of price discounts to the disruptive firm that it had previously offered in the pre-merger market.

### **5.2. ELIMINATING THE MERGED FIRM'S INCENTIVES TO DISRUPT COORDINATION**

A vertical merger can reduce the upstream merging firm's incentives to defect or otherwise disrupt coordination in a relevant upstream (input) market that otherwise might be vulnerable to coordination. In contrast to pre-merger coordination incentives, the merged firm may recognize that its downstream manufacturing business would benefit if its rivals pay more for the input, by leading those rivals to reduce their output or otherwise compete less aggressively, while the merged firm can self-supply its downstream division. This change in incentives can increase the likelihood of successful coordination in the upstream market.

This incentive may be most pronounced if the upstream affiliate of the merging firm has been acting as a maverick or disruptive seller, or if the downstream merging firm has been acting as a disruptive buyer of those inputs in the pre-merger upstream market. Competitive concerns from a vertical merger are particularly heightened in these cases because of the risk that it would eliminate these procompetitive incentives.

### **5.3. COLLUSIVE MISUSE OF SENSITIVE COMPETITIVE INFORMATION**

Coordinated effects may also arise when the merged firm gains access to rivals' sensitive competitive information, which may facilitate either (a) reaching a tacit agreement among market participants, (b) detecting cheating on such an agreement, or (c) punishing cheating firms.

*Example 16: Manufacturer A designs and produces components used by Fabricators B, C, and*

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<sup>22</sup> This coordination also could disadvantage its downstream competitors through input foreclosure and further harm the customers of the downstream firms.

*D. Manufacturer A may have some competitively sensitive information about how much output Fabricators B and C produce. After merging with Fabricator B, the merged firm may be better able to better detect cheating on a tacit agreement to limit fabrication output. It also may be able to punish a defecting firm by delaying deliveries or reducing cooperation in other ways. Similarly, if Fabricator B buys some components from the competitors of Manufacturer A, it may have competitively sensitive information about the prices charged by those competing component manufacturers, which similarly would increase the ability to detect cheating on a tacit agreement to raise component prices. In both cases, the merger may make a tacit or express agreement at either level more effective.*

#### **5.4. COORDINATED FORECLOSURE**

If one of the non-merging firms is vertically integrated, the vertical merger may lead to coordinated foreclosure by the vertically integrated firms. Coordinated foreclosure may be more profitable than unilateral foreclosure by either one of them. As a result, foreclosure conduct by one of the integrated firms may be followed by similar conduct by the other integrated firm.<sup>23</sup> The vertical merger also may lead to greater symmetry in costs, as well as more symmetric incentives of the vertically integrated firms.

#### **6. EVIDENCE OF ADVERSE COMPETITIVE EFFECTS**

The Agencies consider any reasonably available and reliable evidence to address the central question of whether a vertical merger may substantially lessen competition. This evidence includes both economic and documentary evidence. The sources of evidence are the same or similar to the evidence set forth in Section 2.2 of the Horizontal Merger Guidelines and include documents and statements of the merging parties, their customers, and other industry participants and observers. The types of evidence described in Section 2.1 of the Horizontal Merger Guidelines can also be informative about the effects of vertical mergers, including: actual effects observed in consummated mergers, direct comparisons based on experience, and evidence about the disruptive role of a merging party. Pre-existing contractual relationships may affect a range of relevant market characteristics. The Agencies also may consider market shares and concentration in relevant markets and related product segments (see Section 3), though direct evidence is generally preferred to these structural indicia proxies when it is available.

The Agencies may consider evidence regarding prices and premerger competitive interaction in the upstream and downstream markets, the ability of customers in both markets to substitute among the competing firms inside the relevant market, including the role of switching costs and product differentiation, upstream and downstream gross margins, the importance of the input to the downstream competitors, the importance of input sales to the downstream merging firm by the upstream competitors, and demand elasticities. They also may rely on economic evidence about value of diverted sales, head-to-head competition and incentives to accommodate by the upstream and downstream rivals of the merging firm when analyzing unilateral effects, as well as non-price responses, ease of entry and repositioning (see Section 4). The Agencies also may analyze evidence of the vulnerability of the market to coordination when analyzing coordinated effects (see Section 5). They also will analyze

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<sup>23</sup> Accommodating price increases by unintegrated upstream competitors to unilateral input foreclosure by the merging firm also might be viewed as a type of conscious parallelism that resembles coordinated conduct without any agreement.

evidence regarding claimed competitive benefits (see Section 7).

The Agencies do not require evidence that quantifies competitive harms and benefits to reliably evaluate the likely competitive effects of the merger. Qualitative evidence may be sufficient. However, where sufficient data are available, the Agencies may construct economic models designed to quantify the potential effects of the merger. These models typically would include price responses by non-merging firms and the impact of elimination of double marginalization and other cognizable efficiency benefits (as discussed below) to estimate the likely net effect on consumers. However, the Agencies do not treat merger simulation evidence or other quantification evidence as necessary or conclusive in themselves. The Agencies recognize that the evaluation of such models often is highly complex because the results of such models may be sensitive to availability of necessary data, the particular data used, and the assumptions and structure of the model, and that, as a result, the predictions of the model may not be robust to changes in various factors and data used. Most such models focus only on prices and assume that there is no pre-merger coordination, which also may limit the reliability of their predictions. The agencies also recognize that some standard statistical tests are designed solely to avoid false positives, while placing no weight on avoiding false negatives, which makes these tests less reliable for determining the likely competitive effects of the transaction. As a result, the Agencies analyze such quantitative models with skepticism.

## **7. COMPETITIVE BENEFITS**

Like horizontal mergers, vertical mergers can create competitive benefits that increase competition and benefit buyers. Vertical mergers bring together complementary assets, including those used at different levels in the supply chain, to make a final product. A merged firm may be able to coordinate use of these assets to reduce costs or improve the product design and production process in ways that would not be achieved through arm's-length cooperation or contracts. Standalone firms may cooperate in designing new products, sharing information and achieving efficient distribution, but a vertical merger may improve the process by sharing proprietary information and avoiding free riding incentives. A vertical merger may harmonize incentives of the merging firms so that each division of the merged firm takes account of the benefits and costs of its actions on the other division. This includes the incentive to pass on as lower prices the "elimination of double marginalization" that can occur from a vertical or complementary product merger. Cost reductions or other efficiencies also may create competitive benefits by creating a maverick producer, or the merger may change other characteristics of the merged firm in a way that reduces its incentives to engage in anticompetitive coordination.

Vertical mergers do not always achieve these potential competitive benefits. Many integrated firms do not transfer inputs from their upstream division to their downstream division. The input product affiliate may face capacity constraints that prevent expansion of input transfers. Integration can be difficult as a result of different functions and corporate cultures. Companies sometimes choose to maintain arms-length relationships among its divisions.

Where a vertical merger raises a reasonable probability of competitive harm, the Agencies will evaluate the cognizability and magnitude of the competitive benefit claims made by the parties, using the approach set forth in Section 10 of the Horizontal Merger Guidelines. Technological efficiencies and procompetitive incentive benefits are cognizable only to the extent that they are merger-specific, 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 and risks that the benefits will not occur.

The Agencies do not challenge a merger if the parties can establish that the cognizable benefits have a character and magnitude such that they are sufficient to reverse or deter any likely anticompetitive harms in every relevant market where a reasonable probability of competitive harm has been identified. In carrying out this analysis, the Agencies will consider whether some claimed efficiencies might be accompanied by conduct that raises the cost or reduces the quality or innovation of competitors. For example, a vertical merger that leads the downstream merging firm to gain more rapid access to the innovative new products of the upstream firm may be accompanied by absolute (not simply relative) delays in making those products available to downstream competitors.

### **7.1. TECHNOLOGICAL EFFICIENCIES**

A vertical merger may improve design, production, inventory management, distribution, and innovation in ways that would not be achieved through arm's-length cooperation or contracts. By harmonizing the goals of the merging firms, the merger may lead to information sharing that can reduce costs of production, distribution, advertising and so on. Cooperation and information sharing within the firm can lead to new and better product designs that improve product quality. By combining expertise and avoiding duplication, innovation may be faster and less expensive.

### **7.2. ELIMINATION OF FREE RIDING**

Vertical mergers can lead each of the merging firms to take account of the costs and benefits of their actions on the other affiliate, whereas each might ignore those effects absent the merger, an incentive effect which is analogous to elimination of free riding. This can lead to higher investment and lower prices.

For example, a pre-merger investment by one of the firms might increase the profits of both firms, but the investing firm would not take the profit benefit to the other firm into account and its own profits might be too small to justify the most efficient investment. Negotiations to share the cost might fail if either or both firms understate their benefits. As a result, the firm might undertake a smaller investment that is profitable for itself but leads to lower combined value for the two firms. In this way, the attempt by the other firm to free ride on the investments of the other can lead to underinvestment.

### **7.3. PASSING-ON ELIMINATION OF DOUBLE MARGINALIZATION**

Elimination of double marginalization (EDM) can occur when a vertical merger leads to the upstream firm's input being transferred to the downstream firm at marginal cost rather than at a positive price-cost margin price and the downstream firm also earns a positive price-cost margin.<sup>24</sup> Customers can benefit if this EDM is passed-on in the form of a lower profit-maximizing downstream price. Absent the merger or output-driving contractual provisions, the downstream merging firm would not take into account the increased profits accruing to the upstream merging firm from setting a lower downstream price and making higher sales and input purchases. Capturing the upstream margin may make a downstream price reduction profitable even though it would not have been profitable prior to the merger, which then may benefit both the merged firm and buyers of the downstream product or service. In carrying out this analysis, the agencies will presume that the upstream and downstream divisions of the merged firms will

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<sup>24</sup> The relevant input and output margins are the difference between price and marginal cost. Elimination of double marginalization assumes that both margins are positive.

act as unitary entity and choose prices and other conduct to maximize their combined profits.<sup>25</sup>

The Agencies will not presume that there will be sufficient EDM pass-on to reverse the incentives to raise price or the competitive harms identified (see Section 5 & 6). The agencies treat EDM pass-on in the same way as other potentially cognizable competitive benefit claims made by the parties. The parties are required to show that benefits are merger-specific, verifiable and sufficient to reverse any anticompetitive harms in the relevant market.

Pass-on of EDM may be small or even not occur for various reasons. One or both of the pre-merger margins may be low. The downstream affiliate may be unable to use the inputs from the upstream firm because it uses an incompatible technology, because it faces significant switching costs, or because it is locked-in to other input suppliers by long-term supply contracts. The upstream affiliate may face capacity constraints or rising marginal costs that limit its ability or incentive to expand sales to the downstream affiliate. The merging parties may already have engaged in contracting that aligned their incentives to some extent prior to the merger, for example, by using a quantity-driving contract, volume discounts, or a two-part tariff with a fixed fee and unit prices with a small margin.<sup>26</sup> EDM pass-on also may not occur if the firms merging are concerned that their low prices would spread to other downstream and upstream firms or if there is pricing coordination. EDM pass-on also may be constrained or disincentivized by most-favored nations or other contractual provisions.

The incentive for EDM pass-on also may be mitigated or eliminated if downstream rivals also purchase from the upstream merging firm. If the merged firm raises its price in the downstream market, downstream rivals may increase their sales, which could increase their demand for inputs from the upstream affiliate of the merged firm. This upstream benefit represents an opportunity cost of EDM pass-on, makes EDM pass-on less profitable and makes downstream price increases more profitable after the merger. This offsetting effects is larger if the rivals used more of the input or paid higher prices to the upstream merging firm before the merger, relative to the downstream merging firm.<sup>27</sup>

A merger may not be reasonably necessary to eliminate double marginalization. It will not be merger-specific if the parties could achieve the outcome as a practical matter absent the merger. The Agencies will not presume merger-specificity simply because it was not achieved in the pre-merger market, but will expect the parties to provide credible evidence of pre-merger impediments and how the merger will eliminate the impediments.<sup>28</sup> Analysis of this issue may include the following types of historical evidence: the parties attempts to achieve agreement, including negotiations just prior to the merger; the efforts and success of other firms in the industry to achieve the benefit; the record of the merging firms in

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<sup>25</sup> If the downstream merging party has a track record of instructing its input and output divisions to treat inter-firm transfer prices in their divisional profit calculations as if they were purchases or sales by third parties, the Agencies will recognize that this conduct can reduce the likelihood of EDM pass-on, so will investigate the rationale for and impact of this conduct. The Agencies recognize that an integrated firm may instruct this conduct for input transfers even while profitably choosing to foreclose rival firms, as discussed in Section 4.1.

<sup>26</sup> To the extent that the merging parties have partially eliminated double marginalization pre-merger, the competitive benefits from that portion are not merger-specific.

<sup>27</sup> In some cases, this effect can reverse EDM pass-on and lead on balance to upward pricing pressure instead of downward pricing pressure.

<sup>28</sup> The existence of some bargaining frictions by itself is not sufficient evidence since all negotiations involve bargaining frictions and they may not prevent a contract.

dealing with double marginalization for other inputs produced and used by different divisions; the firms' pricing decisions to account for demand interactions, if the firms sell multiple substitute or complementary products; the firm culture and compensation structure of divisional executives with respect to the performance of the executives' divisions versus the entire corporation. Impediments to elimination of double marginalization arising from pre-merger coordination or anticompetitive agreements will not be credited by the Agencies.

#### **7.4. OUT-OF-MARKET COMPETITIVE BENEFITS**

Out-of-market competitive benefits can occur in vertical mergers as well as in horizontal mergers. For example, there could be competitive harms from coordination in the upstream relevant market, but there simultaneously could be cognizable efficiency benefits in the downstream related product segment such that the customers of the downstream firms may be benefited on balance.<sup>29</sup> There also could be harms in multiple relevant markets but benefits in some other related product segment or relevant market.<sup>30</sup> Where the harms cannot be remedied with a consent decree that permits the merger, the Agencies will follow the approach to out-of-market efficiencies in the Horizontal Merger Guidelines (see Section 10). If competitive harms occur in one relevant market, and competitive benefits occur in a separate related product segment or relevant market, these out-of-market benefits normally will not be treated as cognizable. However, if the benefits and harms are "inextricably linked," they may be taken into account in the Agencies' "prosecutorial discretion."

### **8. ANTICOMPETITIVE PRESUMPTIONS**

In light of the incipency standards applied to merger under Section 7 of the Clayton Act and the greater concerns raised by mergers in modern markets, the agencies will apply the following rebuttable anticompetitive presumptions to vertical and complementary product mergers.

Dominant platform presumption: The Agencies will presume that competition likely would be harmed if a platform that is dominant in its market acquires an actual or potential competitor into this market, or into a vertically related or complementary product market. The presumption recognizes that a dominant platform's market power would give it the ability to foreclose actual or potential competitors in various ways, including failing to interoperate on an equal basis or charging supra-competitive higher access prices.

Elimination of potential entry presumption: The Agencies will presume that competition likely would be harmed if either or both merging firms have a substantial probability of entering the other firm's concentrated market absent the merger. This is because the merger would eliminate the possibility or fear of that entry.

Disruptive or maverick seller presumption: The Agencies will presume that competition likely would be harmed if the upstream merging firm in a concentrated input market supplies the product purchased by competitors of the other merging firm, and by its conduct has prevented or substantially constrained

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<sup>29</sup> In the case of competitive harms arising from unilateral conduct, the Agencies will focus on harm to the customers of the downstream firms.

<sup>30</sup> For example, there could be harms in both markets if the vertical merger eliminates a downstream disruptive input buyer or an upstream maverick.

coordination in the upstream market. This is because the constraining influence of the disruptive or maverick firm could be eliminated, leading to higher input market prices and then likely leading in turn to higher prices in the downstream market.

Disruptive or maverick buyer presumption: The Agencies will presume that competition likely would be harmed if the downstream merging firm is a purchaser of the product sold by the upstream merging firm or its competitors, and by its conduct has substantially constrained coordination in the sale of that product by the other merging firm and its competitors in a concentrated input market. This is because the merger likely would eliminate its incentive to act in this disruptive way.

Evasion of regulation presumption: The Agencies will presume that competition likely would be harmed if the downstream firm's maximum price is regulated, and the regulation permits the downstream firm to raise its price in response to cost increases. This is because regulated downstream firm could raise the price of the input supplied to it by its upstream merger partner, increasing upstream profits and downstream prices. Evasion of regulation could also occur if the merger involves firms that sell complementary products since the merged firm could raise the price of the bundle.