Antitrust Guidelines for Collaborations Among Competitors





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ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS

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PREAMBLE

In order to compete in modern markets, competitors sometimes need to collaborate. Competitive forces are driving firms toward complex collaborations to achieve goals such as expanding into foreign markets, funding expensive innovation efforts, and lowering production and other costs.

Such collaborations often are not only benign but procompetitive. Indeed, in the last two decades, the federal antitrust agencies have brought relatively few civil cases against competitor collaborations. Nevertheless, a perception that antitrust laws are skeptical about agreements among actual or potential competitors may deter the development of procompetitive collaborations.¹

To provide guidance to business people, the Federal Trade Commission ("FTC") and the U.S. Department of Justice ("DOJ") (collectively, "the Agencies") previously issued guidelines addressing several special circumstances in which antitrust issues related to competitor collaborations may arise.² But none of these Guidelines represents a general statement of the Agencies' analytical approach to competitor collaborations. The increasing varieties and use of competitor collaborations have yielded requests for improved clarity regarding their treatment under the antitrust laws.

The new Antitrust Guidelines for Collaborations among Competitors ("Competitor Collaboration Guidelines") are intended to explain how the Agencies analyze certain antitrust issues raised by collaborations among competitors. Competitor collaborations and the market circumstances in which they operate vary widely. No set of guidelines can provide specific

¹ Congress has protected certain collaborations from full antitrust liability by passing the National Cooperative Research Act of 1984 ("NCRA") and the National Cooperative Research and Production Act of 1993 ("NCRPA") (codified together at 15 U.S.C. § § 4301-06).

² The Statements of Antitrust Enforcement Policy in Health Care ("Health Care Statements") outline the Agencies' approach to certain health care collaborations, among other things. The Antitrust Guidelines for the Licensing of Intellectual Property ("Intellectual Property Guidelines") outline the Agencies' enforcement policy with respect to intellectual property licensing agreements among competitors, among other things. The 1992 DOJ/FTC Horizontal Merger Guidelines, as amended in 1997 ("Horizontal Merger Guidelines"), outline the Agencies' and acquisitions, and certain competitor collaborations.

answers to every antitrust question that might arise from a competitor collaboration. These Guidelines describe an analytical framework to assist businesses in assessing the likelihood of an antitrust challenge to a collaboration with one or more competitors. They should enable businesses to evaluate proposed transactions with greater understanding of possible antitrust implications, thus encouraging procompetitive collaborations, deterring collaborations likely to harm competition and consumers, and facilitating the Agencies' investigations of collaborations.

SECTION 1: PURPOSE, DEFINITIONS, AND OVERVIEW

1.1 Purpose and Definitions

These Guidelines state the antitrust enforcement policy of the Agencies with respect to competitor collaborations. By stating their general policy, the Agencies hope to assist businesses in assessing whether the Agencies will challenge a competitor collaboration or any of the agreements of which it is comprised.³ However, these Guidelines cannot remove judgment and discretion in antitrust law enforcement. The Agencies evaluate each case in light of its own facts and apply the analytical framework set forth in these Guidelines reasonably and flexibly.⁴

A "competitor collaboration" comprises a set of one or more agreements, other than merger agreements, between or among competitors to engage in economic activity, and the economic activity resulting therefrom.⁵ "Competitors" encompasses both actual and potential competitors.⁶ Competitor collaborations involve one or more business activities, such as research and development ("R&D"), production, marketing, distribution, sales or purchasing. Information sharing and various trade association activities also may take place through competitor

⁴ The analytical framework set forth in these Guidelines is consistent with the analytical frameworks in the *Health Care Statements* and the *Intellectual Property Guidelines*, which remain in effect to address issues in their special contexts.

⁵ These Guidelines take into account neither the possible effects of competitor collaborations in foreclosing or limiting competition by rivals not participating in a collaboration nor the possible anticompetitive effects of standard setting in the context of competitor collaborations. Nevertheless, these effects may be of concern to the Agencies and may prompt enforcement actions.

⁶ Firms also may be in a buyer-seller or other relationship, but that does not eliminate the need to examine the competitor relationship, if present. A firm is treated as a potential competitor if there is evidence that entry by that firm is reasonably probable in the absence of the relevant agreement, or that competitively significant decisions by actual competitors are constrained by concerns that anticompetitive conduct likely would induce the firm to enter.

³ These Guidelines neither describe how the Agencies litigate cases nor assign burdens of proof or production.

collaborations.

These Guidelines use the terms "anticompetitive harm," "procompetitive benefit," and "overall competitive effect" in analyzing the competitive effects of agreements among competitors. All of these terms include actual and likely competitive effects. The Guidelines use the term "anticompetitive harm" to refer to an agreement's adverse competitive consequences, without taking account of offsetting procompetitive benefits. Conversely, the term "procompetitive benefit" refers to an agreement's favorable competitive consequences, without taking account of its anticompetitive harm. The terms "overall competitive effect" or "competitive effect" are used in discussing the combination of an agreement's anticompetitive harm and procompetitive benefit.

1.2 Overview of Analytical Framework

Two types of analysis are used by the Supreme Court to determine the lawfulness of an agreement among competitors: per se and rule of reason.⁷ Certain types of agreements are so likely to harm competition and to have no significant procompetitive benefit that they do not warrant the time and expense required for particularized inquiry into their effects. Once identified, such agreements are challenged as per se unlawful.⁸ All other agreements are evaluated under the rule of reason, which involves a factual inquiry into an agreement's overall competitive effect. As the Supreme Court has explained, rule of reason analysis entails a flexible inquiry and varies in focus and detail depending on the nature of the agreement and market circumstances.⁹

This overview briefly sets forth questions and factors that the Agencies assess in analyzing an agreement among competitors. The rest of the Guidelines should be consulted for the detailed definitions and discussion that underlie this analysis.

Agreements Challenged as Per Se Illegal. Agreements of a type that always or almost always tends to raise price or to reduce output are per se illegal. The Agencies challenge such agreements, once identified, as per se illegal. Types of agreements that have been held per se illegal include agreements among competitors to fix prices or output, rig bids, or share or divide markets by allocating customers, suppliers, territories, or lines of commerce. The courts conclusively presume such agreements, once identified, to be illegal, without inquiring into their claimed business purposes, anticompetitive harms, procompetitive benefits, or overall competitive effects. The Department of Justice prosecutes participants in hard-core cartel agreements criminally.

⁷ See National Soc'y of Prof'l. Eng'rs v. United States, 435 U.S. 679, 692 (1978).

⁸ See FTC v. Superior Court Trial Lawyers Ass'n, 493 U.S. 411, 432-36 (1990).

⁹ See California Dental Ass'n v. FTC, 119 S. Ct. 1604, 1617-18 (1999); FTC v. Indiana Fed'n of Dentists, 476 U.S. 447, 459-61 (1986); National Collegiate Athletic Ass'n v. Board of Regents of the Univ. of Okla., 468 U.S. 85, 104-13 (1984).

Agreements Analyzed under the Rule of Reason. Agreements not challenged as per se illegal are analyzed under the rule of reason to determine their overall competitive effect. These include agreements of a type that otherwise might be considered per se illegal, provided they are reasonably related to, and reasonably necessary to achieve procompetitive benefits from, an efficiency-enhancing integration of economic activity.

Rule of reason analysis focuses on the state of competition with, as compared to without, the relevant agreement. The central question is whether the relevant agreement likely harms competition by increasing the ability or incentive profitably to raise price above or reduce output, quality, service, or innovation below what likely would prevail in the absence of the relevant agreement.

Rule of reason analysis entails a flexible inquiry and varies in focus and detail depending on the nature of the agreement and market circumstances. The Agencies focus on only those factors, and undertake only that factual inquiry, necessary to make a sound determination of the overall competitive effect of the relevant agreement. Ordinarily, however, no one factor is dispositive in the analysis.

The Agencies' analysis begins with an examination of the nature of the relevant agreement. As part of this examination, the Agencies ask about the business purpose of the agreement and examine whether the agreement, if already in operation, has caused anticompetitive harm. In some cases, the nature of the agreement and the absence of market power together may demonstrate the absence of anticompetitive harm. In such cases, the Agencies do not challenge the agreement. Alternatively, where the likelihood of anticompetitive harm is evident from the nature of the agreement, or anticompetitive harm has resulted from an agreement already in operation, then, absent overriding benefits that could offset the anticompetitive harm, the Agencies challenge such agreements without a detailed market analysis.

If the initial examination of the nature of the agreement indicates possible competitive concerns, but the agreement is not one that would be challenged without a detailed market analysis, the Agencies analyze the agreement in greater depth. The Agencies typically define relevant markets and calculate market shares and concentration as an initial step in assessing whether the agreement may create or increase market power or facilitate its exercise. The Agencies examine the extent to which the participants and the collaboration have the ability and incentive to compete independently. The Agencies also evaluate other market circumstances, e.g. entry, that may foster or prevent anticompetitive harms.

If the examination of these factors indicates no potential for anticompetitive harm, the Agencies end the investigation without considering procompetitive benefits. If investigation indicates anticompetitive harm, the Agencies examine whether the relevant agreement is reasonably necessary to achieve procompetitive benefits that likely would offset anticompetitive harms.

1.3 Competitor Collaborations Distinguished from Mergers

The competitive effects from competitor collaborations may differ from those of mergers due to a number of factors. Most mergers completely end competition between the merging parties in the relevant market(s). By contrast, most competitor collaborations preserve some form of competition among the participants. This remaining competition may reduce competitive concerns, but also may raise questions about whether participants have agreed to anticompetitive restraints on the remaining competition.

Mergers are designed to be permanent, while competitor collaborations are more typically of limited duration. Thus, participants in a collaboration typically remain potential competitors, even if they are not actual competitors for certain purposes (*e.g.*, R&D) during the collaboration. The potential for future competition between participants in a collaboration requires antitrust scrutiny different from that required for mergers.

Nonetheless, in some cases, competitor collaborations have competitive effects identical to those that would arise if the participants merged in whole or in part. The Agencies treat a competitor collaboration as a horizontal merger in a relevant market and analyze the collaboration pursuant to the *Horizontal Merger Guidelines* if appropriate, which ordinarily is when: (a) the participants are competitors in that relevant market; (b) the formation of the collaboration involves an efficiency-enhancing integration of economic activity in the relevant market; (c) the integration eliminates all competition among the participants in the relevant market; and (d) the collaboration does not terminate within a sufficiently limited period¹⁰ by its own specific and express terms.¹¹ Effects of the collaboration on competition in other markets are analyzed as appropriate under these Guidelines or other applicable precedent. *See* Example 1.¹²

SECTION 2: GENERAL PRINCIPLES FOR EVALUATING AGREEMENTS AMONG COMPETITORS

2.1 **Potential Procompetitive Benefits**

¹⁰ In general, the Agencies use ten years as a term indicating sufficient permanence to justify treatment of a competitor collaboration as analogous to a merger. The length of this term may vary, however, depending on industry-specific circumstances, such as technology life cycles.

¹¹ This definition, however, does not determine obligations arising under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, 15 U.S.C. § 18a.

¹² Examples illustrating this and other points set forth in these Guidelines are included in the Appendix.

The Agencies recognize that consumers may benefit from competitor collaborations in a variety of ways. For example, a competitor collaboration may enable participants to offer goods or services that are cheaper, more valuable to consumers, or brought to market faster than would be possible absent the collaboration. A collaboration may allow its participants to better use existing assets, or may provide incentives for them to make output-enhancing investments that would not occur absent the collaboration. The potential efficiencies from competitor collaborations may be achieved through a variety of contractual arrangements including joint ventures, trade or professional associations, licensing arrangements, or strategic alliances.

Efficiency gains from competitor collaborations often stem from combinations of different capabilities or resources. For example, one participant may have special technical expertise that usefully complements another participant's manufacturing process, allowing the latter participant to lower its production cost or improve the quality of its product. In other instances, a collaboration may facilitate the attainment of scale or scope economies beyond the reach of any single participant. For example, two firms may be able to combine their research or marketing activities to lower their cost of bringing their products to market, or reduce the time needed to develop and begin commercial sales of new products. Consumers may benefit from these collaborations as the participants are able to lower prices, improve quality, or bring new products to market faster.

2.2 Potential Anticompetitive Harms

Competitor collaborations may harm competition and consumers by increasing the ability or incentive profitably to raise price above or reduce output, quality, service, or innovation below what likely would prevail in the absence of the relevant agreement. Such effects may arise through a variety of mechanisms. Among other things, agreements may limit independent decision making or combine the control of or financial interests in production, key assets, or decisions regarding price, output, or other competitively sensitive variables, or may otherwise reduce the participants' ability or incentive to compete independently.

Competitor collaborations also may facilitate explicit or tacit collusion through facilitating practices such as the exchange or disclosure of competitively sensitive information or through increased market concentration. Such collusion may involve the relevant market in which the collaboration operates or another market in which the participants in the collaboration are actual or potential competitors.

2.3 Analysis of the Overall Collaboration and the Agreements of Which It Consists

A competitor collaboration comprises a set of one or more agreements, other than merger agreements, between or among competitors to engage in economic activity, and the economic activity resulting therefrom. In general, the Agencies assess the competitive effects of the overall

collaboration and any individual agreement or set of agreements within the collaboration that may harm competition. For purposes of these Guidelines, the phrase "relevant agreement" refers to whichever of these three – the overall collaboration, an individual agreement, or a set of agreements – the evaluating Agency is assessing. Two or more agreements are assessed together if their procompetitive benefits or anticompetitive harms are so intertwined that they cannot meaningfully be isolated and attributed to any individual agreement. *See* Example 2.

2.4 Competitive Effects Are Assessed as of the Time of Possible Harm to Competition

The competitive effects of a relevant agreement may change over time, depending on changes in circumstances such as internal reorganization, adoption of new agreements as part of the collaboration, addition or departure of participants, new market conditions, or changes in market share. The Agencies assess the competitive effects of a relevant agreement as of the time of possible harm to competition, whether at formation of the collaboration or at a later time, as appropriate. *See* Example 3. However, an assessment after a collaboration has been formed is sensitive to the reasonable expectations of participants whose significant sunk cost investments in reliance on the relevant agreement were made before it became anticompetitive.

SECTION 3: ANALYTICAL FRAMEWORK FOR EVALUATING AGREEMENTS AMONG COMPETITORS

3.1 Introduction

Section 3 sets forth the analytical framework that the Agencies use to evaluate the competitive effects of a competitor collaboration and the agreements of which it consists. Certain types of agreements are so likely to be harmful to competition and to have no significant benefits that they do not warrant the time and expense required for particularized inquiry into their effects.¹³ Once identified, such agreements are challenged as per se illegal.¹⁴

Agreements not challenged as per se illegal are analyzed under the rule of reason. Rule of reason analysis focuses on the state of competition with, as compared to without, the relevant agreement. Under the rule of reason, the central question is whether the relevant agreement likely harms competition by increasing the ability or incentive profitably to raise price above or reduce output, quality, service, or innovation below what likely would prevail in the absence of the relevant agreement. Given the great variety of competitor collaborations, rule of reason analysis entails a flexible inquiry and varies in focus and detail depending on the nature of the agreement and market circumstances. Rule of reason analysis focuses on only those factors, and undertakes only the degree of factual inquiry, necessary to assess accurately the overall competitive effect of the

¹³ See Continental TV, Inc. v. GTE Sylvania Inc., 433 U.S. 36, 50 n.16 (1977).

¹⁴ See Superior Court Trial Lawyers Ass'n, 493 U.S. at 432-36.

relevant agreement.15

3.2 Agreements Challenged as Per Se Illegal

Agreements of a type that always or almost always tends to raise price or reduce output are per se illegal.¹⁶ The Agencies challenge such agreements, once identified, as per se illegal. Typically these are agreements not to compete on price or output. Types of agreements that have been held per se illegal include agreements among competitors to fix prices or output, rig bids, or share or divide markets by allocating customers, suppliers, territories or lines of commerce.¹⁷ The courts conclusively presume such agreements, once identified, to be illegal, without inquiring into their claimed business purposes, anticompetitive harms, procompetitive benefits, or overall competitive effects. The Department of Justice prosecutes participants in hard-core cartel agreements criminally.

If, however, participants in an efficiency-enhancing integration of economic activity enter into an agreement that is reasonably related to the integration and reasonably necessary to achieve its procompetitive benefits, the Agencies analyze the agreement under the rule of reason, even if it is of a type that might otherwise be considered per se illegal.¹⁸ See Example 4. In an efficiencyenhancing integration, participants collaborate to perform or cause to be performed (by a joint venture entity created by the collaboration or by one or more participants or by a third party acting on behalf of other participants) one or more business functions, such as production, distribution, marketing, purchasing or R&D, and thereby benefit, or potentially benefit, consumers by expanding output, reducing price, or enhancing quality, service, or innovation. Participants in an efficiency-enhancing integration typically combine, by contract or otherwise, significant capital, technology, or other complementary assets to achieve procompetitive benefits that the participants could not achieve separately. The mere coordination of decisions on price, output, customers, territories, and the like is not integration, and cost savings without integration are not a basis for avoiding per se condemnation. The integration must be of a type that plausibly would generate procompetitive benefits cognizable under the efficiencies analysis set forth in Section 3.36 below. Such procompetitive benefits may enhance the participants' ability or incentives to compete and thus may offset an agreement's anticompetitive tendencies. See Examples 5 through 7.

¹⁵ See California Dental Ass'n, 119 S. Ct. at 1617-18; Indiana Fed'n of Dentists, 476 U.S. at 459-61; NCAA, 468 U.S. at 104-13.

¹⁶ See Broadcast Music, Inc. v. Columbia Broadcasting Sys., 441 U.S. 1, 19-20 (1979).

¹⁷ See, e.g., Palmer v. BRG of Georgia, Inc., 498 U.S. 46 (1990) (market allocation); United States v. Trenton Potteries Co., 273 U.S. 392 (1927) (price fixing).

¹⁸ See Arizona v. Maricopa County Medical Soc'y, 457 U.S. 332, 339 n.7, 356-57 (1982) (finding no integration).

An agreement may be "reasonably necessary" without being essential. However, if the participants could achieve an equivalent or comparable efficiency-enhancing integration through practical, significantly less restrictive means, then the Agencies conclude that the agreement is not reasonably necessary.¹⁹ In making this assessment, except in unusual circumstances, the Agencies consider whether practical, significantly less restrictive means were reasonably available when the agreement was entered into, but do not search for a theoretically less restrictive alternative that was not practical given the business realities.

Before accepting a claim that an agreement is reasonably necessary to achieve procompetitive benefits from an integration of economic activity, the Agencies undertake a limited factual inquiry to evaluate the claim.²⁰ Such an inquiry may reveal that efficiencies from an agreement that are possible in theory are not plausible in the context of the particular collaboration. Some claims – such as those premised on the notion that competition itself is unreasonable – are insufficient as a matter of law,²¹ and others may be implausible on their face. In any case, labeling an arrangement a "joint venture" will not protect what is merely a device to raise price or restrict output;²² the nature of the conduct, not its designation, is determinative.

²¹ See Indiana Fed'n of Dentists, 476 U.S. at 463-64; NCAA, 468 U.S. at 116-17; Prof'l. Eng'rs, 435 U.S. at 693-96. Other claims, such as an absence of market power, are no defense to per se illegality. See Superior Court Trial Lawyers Ass'n, 493 U.S. at 434-36; United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 224-26 & n.59 (1940).

¹⁹ See id. at 352-53 (observing that even if a maximum fee schedule for physicians' services were desirable, it was not necessary that the schedule be established by physicians rather than by insurers); *Broadcast Music*, 441 U.S. at 20-21 (setting of price "necessary" for the blanket license).

²⁰ See Maricopa, 457 U.S. at 352-53, 356-57 (scrutinizing the defendant medical foundations for indicia of integration and evaluating the record evidence regarding less restrictive alternatives).

²² See Timken Roller Bearing Co. v. United States, 341 U.S. 593, 598 (1951).

3.3 Agreements Analyzed under the Rule of Reason

Agreements not challenged as per se illegal are analyzed under the rule of reason to determine their overall competitive effect. Rule of reason analysis focuses on the state of competition with, as compared to without, the relevant agreement. The central question is whether the relevant agreement likely harms competition by increasing the ability or incentive profitably to raise price above or reduce output, quality, service, or innovation below what likely would prevail in the absence of the relevant agreement.²³

Rule of reason analysis entails a flexible inquiry and varies in focus and detail depending on the nature of the agreement and market circumstances.²⁴ The Agencies focus on only those factors, and undertake only that factual inquiry, necessary to make a sound determination of the overall competitive effect of the relevant agreement. Ordinarily, however, no one factor is dispositive in the analysis.

Under the rule of reason, the Agencies' analysis begins with an examination of the nature of the relevant agreement, since the nature of the agreement determines the types of anticompetitive harms that may be of concern. As part of this examination, the Agencies ask about the business purpose of the agreement and examine whether the agreement, if already in operation, has caused anticompetitive harm.²⁵ If the nature of the agreement and the absence of market power²⁶ together demonstrate the absence of anticompetitive harm, the Agencies do not challenge the agreement. *See* Example 8. Alternatively, where the likelihood of anticompetitive harm is evident from the nature of the agreement,²⁷ or anticompetitive harm has resulted from an agreement

²⁵ See Board of Trade of the City of Chicago v. United States, 246 U.S. 231, 238 (1918).

²⁶ That market power is absent may be determined without defining a relevant market. For example, if no market power is likely under any plausible market definition, it does not matter which one is correct. Alternatively, easy entry may indicate an absence of market power.

²⁷ See California Dental Ass'n, 119 S. Ct. at 1612-13, 1617 (an "obvious anticompetitive effect" would warrant quick condemnation); *Indiana Fed'n of Dentists*, 476 U.S. at 459; *NCAA*, 468 U.S. at 104, 106-10.

 $^{^{23}}$ In addition, concerns may arise where an agreement increases the ability or incentive of buyers to exercise monopsony power. *See infra* Section 3.31(a).

²⁴ See California Dental Ass'n, 119 S. Ct. at 1612-13, 1617 ("What is required . . . is an enquiry meet for the case, looking to the circumstances, details, and logic of a restraint."); NCAA, 468 U.S. 109 n.39 ("the rule of reason can sometimes be applied in the twinkling of an eye") (quoting Phillip E. Areeda, *The "Rule of Reason" in Antitrust Analysis: General Issues* 37-38 (Federal Judicial Center, June 1981)).

already in operation,²⁸ then, absent overriding benefits that could offset the anticompetitive harm, the Agencies challenge such agreements without a detailed market analysis.²⁹

If the initial examination of the nature of the agreement indicates possible competitive concerns, but the agreement is not one that would be challenged without a detailed market analysis, the Agencies analyze the agreement in greater depth. The Agencies typically define relevant markets and calculate market shares and concentration as an initial step in assessing whether the agreement may create or increase market power³⁰ or facilitate its exercise and thus poses risks to competition.³¹ The Agencies examine factors relevant to the extent to which the participants and the collaboration have the ability and incentive to compete independently, such as whether an agreement is exclusive or non-exclusive and its duration.³² The Agencies also evaluate whether entry would be timely, likely, and sufficient to deter or counteract any anticompetitive harms. In addition, the Agencies assess any other market circumstances that may foster or impede anticompetitive harms.

If the examination of these factors indicates no potential for anticompetitive harm, the Agencies end the investigation without considering procompetitive benefits. If investigation indicates anticompetitive harm, the Agencies examine whether the relevant agreement is reasonably

²⁹ See Indiana Fed'n of Dentists, 476 U.S. at 459-60 (condemning without "detailed market analysis" an agreement to limit competition by withholding x-rays from patients' insurers after finding no competitive justification).

³⁰ Market power to a seller is the ability profitably to maintain prices above competitive levels for a significant period of time. Sellers also may exercise market power with respect to significant competitive dimensions other than price, such as quality, service, or innovation. Market power to a buyer is the ability profitably to depress the price paid for a product below the competitive level for a significant period of time and thereby depress output.

³¹ See Eastman Kodak Co. v. Image Technical Services, Inc., 504 U.S. 451, 464 (1992).

³² Compare NCAA, 468 U.S. at 113-15, 119-20 (noting that colleges were not permitted to televise their own games without restraint), *with Broadcast Music*, 441 U.S. at 23-24 (finding no legal or practical impediment to individual licenses).

²⁸ See Indiana Fed'n of Dentists, 476 U.S. at 460-61 ("Since the purpose of the inquiries into market definition and market power is to determine whether an arrangement has the potential for genuine adverse effects on competition, 'proof of actual detrimental effects, such as a reduction of output,' can obviate the need for an inquiry into market power, which is but a 'surrogate for detrimental effects."") (quoting 7 Phillip E. Areeda, *Antitrust Law* ¶ 1511, at 424 (1986)); *NCAA*, 468 U.S. at 104-08, 110 n.42.

necessary to achieve procompetitive benefits that likely would offset anticompetitive harms.³³

3.31 Nature of the Relevant Agreement: Business Purpose, Operation in the Marketplace and Possible Competitive Concerns

The nature of the agreement is relevant to whether it may cause anticompetitive harm. For example, by limiting independent decision making or combining control over or financial interests in production, key assets, or decisions on price, output, or other competitively sensitive variables, an agreement may create or increase market power or facilitate its exercise by the collaboration, its participants, or both. An agreement to limit independent decision making or to combine control or financial interests may reduce the ability or incentive to compete independently. An agreement also may increase the likelihood of an exercise of market power by facilitating explicit or tacit collusion,³⁴ either through facilitating practices such as an exchange of competitively sensitive information or through increased market concentration.

In examining the nature of the relevant agreement, the Agencies take into account inferences about business purposes for the agreement that can be drawn from objective facts. The Agencies also consider evidence of the subjective intent of the participants to the extent that it sheds light on competitive effects.³⁵ The Agencies do not undertake a full analysis of procompetitive benefits pursuant to Section 3.36 below, however, unless an anticompetitive harm appears likely. The Agencies also examine whether an agreement already in operation has caused anticompetitive harm.³⁶ Anticompetitive harm may be observed, for example, if a competitor collaboration successfully mandates new, anticompetitive conduct or successfully eliminates procompetitive pre-collaboration conduct, such as withholding services that were desired by consumers when offered in a competitive market. If anticompetitive harm is found, examination of market power ordinarily is not required. In some cases, however, a determination of anticompetitive harm may be informed by consideration of market power.

³⁵ Anticompetitive intent alone does not establish an antitrust violation, and procompetitive intent does not preclude a violation. *See, e.g., Chicago Bd. of Trade*, 246 U.S. at 238. But extrinsic evidence of intent may aid in evaluating market power, the likelihood of anticompetitive harm, and claimed procompetitive justifications where an agreement's effects are otherwise ambiguous.

³⁶ *See id.*

³³ See NCAA, 468 U.S. at 113-15 (rejecting efficiency claims when production was limited, not enhanced); *Prof'l. Eng'rs*, 435 U.S. at 696 (dictum) (distinguishing restraints that promote competition from those that eliminate competition); *Chicago Bd. of Trade*, 246 U.S. at 238 (same).

³⁴ As used in these Guidelines, "collusion" is not limited to conduct that involves an agreement under the antitrust laws.

The following sections illustrate competitive concerns that may arise from the nature of particular types of competitor collaborations. This list is not exhaustive. In addition, where these sections address agreements of a type that otherwise might be considered per se illegal, such as agreements on price, the discussion assumes that the agreements already have been determined to be subject to rule of reason analysis because they are reasonably related to, and reasonably necessary to achieve procompetitive benefits from, an efficiency-enhancing integration of economic activity. *See supra* Section 3.2.

3.31(a) Relevant Agreements that Limit Independent Decision Making or Combine Control or Financial Interests

The following is intended to illustrate but not exhaust the types of agreements that might harm competition by eliminating independent decision making or combining control or financial interests.

Production Collaborations. Competitor collaborations may involve agreements jointly to produce a product sold to others or used by the participants as an input. Such agreements are often procompetitive.³⁷ Participants may combine complementary technologies, know-how, or other assets to enable the collaboration to produce a good more efficiently or to produce a good that no one participant alone could produce. However, production collaborations may involve agreements on the level of output or the use of key assets, or on the price at which the product will be marketed by the collaboration, or on other competitively significant variables, such as quality, service, or promotional strategies, that can result in anticompetitive harm. Such agreements can create or increase market power or facilitate its exercise by limiting independent decision making or by combining in the collaboration, or in certain participants, the control over some or all production or key assets or decisions about key competitive variables that otherwise would be controlled independently.³⁸ Such agreements could reduce individual participants' control over assets necessary to compete and thereby reduce their ability to compete independently, combine financial interests in ways that undermine incentives to compete

³⁷ The *NCRPA* accords rule of reason treatment to certain production collaborations. However, the statute permits per se challenges, in appropriate circumstances, to a variety of activities, including agreements to jointly market the goods or services produced or to limit the participants' independent sale of goods or services produced outside the collaboration. *NCRPA*, 15 U.S.C. §§ 4301-02.

³⁸ For example, where output resulting from a collaboration is transferred to participants for independent marketing, anticompetitive harm could result if that output is restricted or if the transfer takes place at a supracompetitive price. Such conduct could raise participants' marginal costs through inflated per-unit charges on the transfer of the collaboration's output. Anticompetitive harm could occur even if there is vigorous competition among collaboration participants in the output market, since all the participants would have paid the same inflated transfer price.

independently, or both.

Marketing Collaborations. Competitor collaborations may involve agreements jointly to sell, distribute, or promote goods or services that are either jointly or individually produced. Such agreements may be procompetitive, for example, where a combination of complementary assets enables products more quickly and efficiently to reach the marketplace. However, marketing collaborations may involve agreements on price, output, or other competitively significant variables, or on the use of competitively significant assets, such as an extensive distribution network, that can result in anticompetitive harm. Such agreements can create or increase market power or facilitate its exercise by limiting independent decision making; by combining in the collaboration, or in certain participants, control over competitively significant assets or decisions about competitively significant variables that otherwise would be controlled independently; or by combining financial interests in ways that undermine incentives to compete independently. For example, joint promotion might reduce or eliminate comparative advertising, thus harming competition by restricting information to consumers on price and other competitively significant variables.

Buying Collaborations. Competitor collaborations may involve agreements jointly to purchase necessary inputs. Many such agreements do not raise antitrust concerns and indeed may be procompetitive. Purchasing collaborations, for example, may enable participants to centralize ordering, to combine warehousing or distribution functions more efficiently, or to achieve other efficiencies. However, such agreements can create or increase market power (which, in the case of buyers, is called "monopsony power") or facilitate its exercise by increasing the ability or incentive to drive the price of the purchased product, and thereby depress output, below what likely would prevail in the absence of the relevant agreement. Buying collaborations also may facilitate collusion by standardizing participants' costs or by enhancing the ability to project or monitor a participant's output level through knowledge of its input purchases.

Research & Development Collaborations. Competitor collaborations may involve agreements to engage in joint research and development ("R&D"). Most such agreements are procompetitive, and they typically are analyzed under the rule of reason.³⁹ Through the combination of complementary assets, technology, or know-how, an R&D collaboration may enable participants more quickly or more efficiently to research and develop new or improved goods, services, or production processes. Joint R&D agreements, however, can create or increase market power or facilitate its exercise by limiting independent decision making or by combining in the collaboration, or in certain participants, control over competitively significant assets or all or a portion of participants' individual competitive R&D efforts. Although R&D collaborations also may facilitate tacit collusion on R&D efforts, achieving, monitoring, and punishing departures from collusion is sometimes difficult in the R&D context.

³⁹ Aspects of the antitrust analysis of competitor collaborations involving R&D are governed by provisions of the *NCRPA*, 15 U.S.C. §§ 4301-02.

An exercise of market power may injure consumers by reducing innovation below the level that otherwise would prevail, leading to fewer or no products for consumers to choose from, lower quality products, or products that reach consumers more slowly than they otherwise would. An exercise of market power also may injure consumers by reducing the number of independent competitors in the market for the goods, services, or production processes derived from the R&D collaboration, leading to higher prices or reduced output, quality, or service. A central question is whether the agreement increases the ability or incentive anticompetitively to reduce R&D efforts pursued independently or through the collaboration, for example, by slowing the pace at which R&D efforts are pursued. Other considerations being equal, R&D agreements are more likely to raise competitive concerns when the collaboration or its participants already possess a secure source of market power over an existing product and the new R&D efforts might cannibalize their supracompetitive earnings. In addition, anticompetitive harm generally is more likely when R&D competition is confined to firms with specialized characteristics or assets, such as intellectual property, or when a regulatory approval process limits the ability of late-comers to catch up with competitors already engaged in the R&D.

3.31(b) Relevant Agreements that May Facilitate Collusion

Each of the types of competitor collaborations outlined above can facilitate collusion. Competitor collaborations may provide an opportunity for participants to discuss and agree on anticompetitive terms, or otherwise to collude anticompetitively, as well as a greater ability to detect and punish deviations that would undermine the collusion. Certain marketing, production, and buying collaborations, for example, may provide opportunities for their participants to collude on price, output, customers, territories, or other competitively sensitive variables. R&D collaborations, however, may be less likely to facilitate collusion regarding R&D activities since R&D often is conducted in secret, and it thus may be difficult to monitor an agreement to coordinate R&D. In addition, collaborations can increase concentration in a relevant market and thus increase the likelihood of collusion among all firms, including the collaboration and its participants.

Agreements that facilitate collusion sometimes involve the exchange or disclosure of information. The Agencies recognize that the sharing of information among competitors may be procompetitive and is often reasonably necessary to achieve the procompetitive benefits of certain collaborations; for example, sharing certain technology, know-how, or other intellectual property may be essential to achieve the procompetitive benefits of an R&D collaboration. Nevertheless, in some cases, the sharing of information related to a market in which the collaboration operates or in which the participants are actual or potential competitively sensitive variables. The competitive concern depends on the nature of the information shared. Other things being equal, the sharing of information relating to price, output, costs, or strategic planning is more likely to raise competitive concern than the sharing of information relating to price planning to less competitively sensitive variables. Similarly, other things being equal, the sharing of information on current operating and future business plans is more likely to raise concerns than the sharing of historical information.

Finally, other things being equal, the sharing of individual company data is more likely to raise concern than the sharing of aggregated data that does not permit recipients to identify individual firm data.

3.32 Relevant Markets Affected by the Collaboration

The Agencies typically identify and assess competitive effects in all of the relevant product and geographic markets in which competition may be affected by a competitor collaboration, although in some cases it may be possible to assess competitive effects directly without defining a particular relevant market(s). Markets affected by a competitor collaboration include all markets in which the economic integration of the participants' operations occurs or in which the collaboration operates or will operate,⁴⁰ and may also include additional markets in which any participant is an actual or potential competitor.⁴¹

3.32(a) Goods Markets

In general, for goods⁴² markets affected by a competitor collaboration, the Agencies approach relevant market definition as described in Section 1 of the *Horizontal Merger Guidelines*. To determine the relevant market, the Agencies generally consider the likely reaction of buyers to a price increase and typically ask, among other things, how buyers would respond to increases over prevailing price levels. However, when circumstances strongly suggest that the prevailing price exceeds what likely would have prevailed absent the relevant agreement, the Agencies use a price more reflective of the price that likely would have prevailed. Once a market has been defined, market shares are assigned both to firms currently in the relevant market and to firms that are able to make "uncommitted" supply responses. *See* Sections 1.31 and 1.32 of the *Horizontal Merger Guidelines*.

3.32(b) Technology Markets

When rights to intellectual property are marketed separately from the products in which they are used, the Agencies may define technology markets in assessing the competitive effects of a competitor collaboration that includes an agreement to license intellectual property. Technology markets consist of the intellectual property that is licensed and its close substitutes;

⁴⁰ For example, where a production joint venture buys inputs from an upstream market to incorporate in products to be sold in a downstream market, both upstream and downstream markets may be "markets affected by a competitor collaboration."

⁴¹ Participation in the collaboration may change the participants' behavior in this third category of markets, for example, by altering incentives and available information, or by providing an opportunity to form additional agreements among participants.

⁴² The term "goods" also includes services.

that is, the technologies or goods that are close enough substitutes significantly to constrain the exercise of market power with respect to the intellectual property that is licensed. The Agencies approach the definition of a relevant technology market and the measurement of market share as described in Section 3.2.2 of the *Intellectual Property Guidelines*.

3.32(c) Research and Development: Innovation Markets

In many cases, an agreement's competitive effects on innovation are analyzed as a separate competitive effect in a relevant goods market. However, if a competitor collaboration may have competitive effects on innovation that cannot be adequately addressed through the analysis of goods or technology markets, the Agencies may define and analyze an innovation market as described in Section 3.2.3 of the *Intellectual Property Guidelines*. An innovation market consists of the research and development directed to particular new or improved goods or processes and the close substitutes for that research and development. The Agencies define an innovation market only when the capabilities to engage in the relevant research and development can be associated with specialized assets or characteristics of specific firms.

3.33 Market Shares and Market Concentration

Market share and market concentration affect the likelihood that the relevant agreement will create or increase market power or facilitate its exercise. The creation, increase, or facilitation of market power will likely increase the ability and incentive profitably to raise price above or reduce output, quality, service, or innovation below what likely would prevail in the absence of the relevant agreement.

Other things being equal, market share affects the extent to which participants or the collaboration must restrict their own output in order to achieve anticompetitive effects in a relevant market. 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. In assessing whether an agreement may cause anticompetitive harm, the Agencies typically calculate the market shares of the participants and of the collaboration.⁴³ The Agencies assign a range of market shares to the collaboration. The high end of that range is the sum of the market shares of the collaboration and its participants. The low end is the share of the collaboration in isolation. In general, the Agencies approach the calculation of market share as set forth in Section 1.4 of the *Horizontal Merger Guidelines*.

Other things being equal, market concentration affects the difficulties and costs of achieving and

⁴³ When the competitive concern is that a limitation on independent decision making or a combination of control or financial interests may yield an anticompetitive reduction of research and development, the Agencies typically frame their inquiries more generally, looking to the strength, scope, and number of competing R&D efforts and their close substitutes. *See supra* Sections 3.31(a) and 3.32(c).

enforcing collusion in a relevant market. Accordingly, in assessing whether an agreement may increase the likelihood of collusion, the Agencies calculate market concentration. In general, the Agencies approach the calculation of market concentration as set forth in Section 1.5 of the *Horizontal Merger Guidelines*, ascribing to the competitor collaboration the same range of market shares described above.

Market share and market concentration provide only a starting point for evaluating the competitive effect of the relevant agreement. The Agencies also examine other factors outlined in the *Horizontal Merger Guidelines* as set forth below:

The Agencies consider whether factors such as those discussed in Section 1.52 of the *Horizontal Merger Guidelines* indicate that market share and concentration data overstate or understate the likely competitive significance of participants and their collaboration.

In assessing whether anticompetitive harm may arise from an agreement that combines control over or financial interests in assets or otherwise limits independent decision making, the Agencies consider whether factors such as those discussed in Section 2.2 of the *Horizontal Merger Guidelines* suggest that anticompetitive harm is more or less likely.

In assessing whether anticompetitive harms may arise from an agreement that may increase the likelihood of collusion, the Agencies consider whether factors such as those discussed in Section 2.1 of the *Horizontal Merger Guidelines* suggest that anticompetitive harm is more or less likely.

In evaluating the significance of market share and market concentration data and interpreting the range of market shares ascribed to the collaboration, the Agencies also examine factors beyond those set forth in the *Horizontal Merger Guidelines*. The following section describes which factors are relevant and the issues that the Agencies examine in evaluating those factors.

3.34 Factors Relevant to the Ability and Incentive of the Participants and the Collaboration to Compete

Competitor collaborations sometimes do not end competition among the participants and the collaboration. Participants may continue to compete against each other and their collaboration, either through separate, independent business operations or through membership in other collaborations. Collaborations may be managed by decision makers independent of the individual participants. Control over key competitive variables may remain outside the collaboration, such as where participants independently market and set prices for the collaboration's output.

Sometimes, however, competition among the participants and the collaboration may be restrained through explicit contractual terms or through financial or other provisions that reduce or eliminate the incentive to compete. The Agencies look to the competitive benefits and harms of the relevant agreement, not merely the formal terms of agreements among the participants.

Where the nature of the agreement and market share and market concentration data reveal a likelihood of anticompetitive harm, the Agencies more closely examine the extent to which the participants and the collaboration have the ability and incentive to compete independent of each other. The Agencies are likely to focus on six factors: (a) the extent to which the relevant agreement is non-exclusive in that participants are likely to continue to compete independently outside the collaboration in the market in which the collaboration operates; (b) the extent to which participants retain independent control of assets necessary to compete; (c) the nature and extent of participants' financial interests in the collaboration or in each other; (d) the control of the collaboration's competitively significant decision making; (e) the likelihood of anticompetitive information sharing; and (f) the duration of the collaboration.

Each of these factors is discussed in further detail below. Consideration of these factors may reduce or increase competitive concern. The analysis necessarily is flexible: the relevance and significance of each factor depends upon the facts and circumstances of each case, and any additional factors pertinent under the circumstances are considered. For example, when an agreement is examined subsequent to formation of the collaboration, the Agencies also examine factual evidence concerning participants' actual conduct.

3.34(a) Exclusivity

The Agencies consider whether, to what extent, and in what manner the relevant agreement permits participants to continue to compete against each other and their collaboration, either through separate, independent business operations or through membership in other collaborations. The Agencies inquire whether a collaboration is non-exclusive in fact as well as in name and consider any costs or other impediments to competing with the collaboration. In assessing exclusivity when an agreement already is in operation, the Agencies examine whether, to what extent, and in what manner participants actually have continued to compete against each other and the collaboration. In general, competitive concern likely is reduced to the extent that participants actually have continued to compete, either through separate, independent business operations or through membership in other collaborations, or are permitted to do so.

3.34(b) Control over Assets

The Agencies ask whether the relevant agreement requires participants to contribute to the collaboration significant assets that previously have enabled or likely would enable participants to be effective independent competitors in markets affected by the collaboration. If such resources must be contributed to the collaboration and are specialized in that they cannot readily be replaced, the participants may have lost all or some of their ability to compete against each other and their collaboration, even if they retain the contractual right to do so.⁴⁴ In general, the greater

⁴⁴ For example, if participants in a production collaboration must contribute most of their productive capacity to the collaboration, the collaboration may impair the ability of its participants to remain effective independent competitors regardless of the terms of the agreement.

the contribution of specialized assets to the collaboration that is required, the less the participants may be relied upon to provide independent competition.

3.34(c) Financial Interests in the Collaboration or in Other Participants

The Agencies assess each participant's financial interest in the collaboration and its potential impact on the participant's incentive to compete independently with the collaboration. The potential impact may vary depending on the size and nature of the financial interest (e.g., whether the financial interest is debt or equity). In general, the greater the financial interest in the collaboration, the less likely is the participant to compete with the collaboration.⁴⁵ The Agencies also assess direct equity investments between or among the participants. Such investments may reduce the incentives of the participants to compete with each other. In either case, the analysis is sensitive to the level of financial interest in the collaboration or in another participant relative to the level of the participant's investment in its independent business operations in the markets affected by the collaboration.

3.34(d) Control of the Collaboration's Competitively Significant Decision Making

The Agencies consider the manner in which a collaboration is organized and governed in assessing the extent to which participants and their collaboration have the ability and incentive to compete independently. Thus, the Agencies consider the extent to which the collaboration's governance structure enables the collaboration to act as an independent decision maker. For example, the Agencies ask whether participants are allowed to appoint members of a board of directors for the collaboration, if incorporated, or otherwise to exercise significant control over the operations of the collaboration. In general, the collaboration is less likely to compete independently as participants gain greater control over the collaboration's price, output, and other competitively significant decisions.⁴⁶

To the extent that the collaboration's decision making is subject to the participants' control, the Agencies consider whether that control could be exercised jointly. Joint control over the collaboration's price and output levels could create or increase market power and raise competitive concerns. Depending on the nature of the collaboration, competitive concern also may arise due to joint control over other competitively significant decisions, such as the level and

⁴⁵ Similarly, a collaboration's financial interest in a participant may diminish the collaboration's incentive to compete with that participant.

⁴⁶ Control may diverge from financial interests. For example, a small equity investment may be coupled with a right to veto large capital expenditures and, thereby, to effectively limit output. The Agencies examine a collaboration's actual governance structure in assessing issues of control.

scope of R&D efforts and investment. In contrast, to the extent that participants independently set the price and quantity ⁴⁷ of their share of a collaboration's output and independently control other competitively significant decisions, an agreement's likely anticompetitive harm is reduced.⁴⁸

3.34(e) Likelihood of Anticompetitive Information Sharing

The Agencies evaluate the extent to which competitively sensitive information concerning markets affected by the collaboration likely would be disclosed. This likelihood depends on, among other things, the nature of the collaboration, its organization and governance, and safeguards implemented to prevent or minimize such disclosure. For example, participants might refrain from assigning marketing personnel to an R&D collaboration, or, in a marketing collaboration, participants might limit access to competitively sensitive information regarding their respective operations to only certain individuals or to an independent third party. Similarly, a buying collaboration might use an independent third party to handle negotiations in which its participants' input requirements or other competitively sensitive information could be revealed. In general, it is less likely that the collaboration will facilitate collusion on competitively sensitive variables if appropriate safeguards governing information sharing are in place.

3.34(f) Duration of the Collaboration

The Agencies consider the duration of the collaboration in assessing whether participants retain the ability and incentive to compete against each other and their collaboration. In general, the shorter the duration, the more likely participants are to compete against each other and their collaboration.

3.35 Entry

Easy entry may deter or prevent profitably maintaining price above, or output, quality, service or innovation below, what likely would prevail in the absence of the relevant agreement. Where the nature of the agreement and market share and concentration data suggest a likelihood of anticompetitive harm that is not sufficiently mitigated by any continuing competition identified

⁴⁸ Anticompetitive harm also is less likely if individual participants may independently increase the overall output of the collaboration.

⁴⁷ Even if prices to consumers are set independently, anticompetitive harms may still occur if participants jointly set the collaboration's level of output. For example, participants may effectively coordinate price increases by reducing the collaboration's level of output and collecting their profits through high transfer prices, *i.e.*, through the amounts that participants contribute to the collaboration in exchange for each unit of the collaboration's output. Where a transfer price is determined by reference to an objective measure not under the control of the participants, (*e.g.*, average price in a different unconcentrated geographic market), competitive concern may be less likely.

through the analysis in Section 3.34, the Agencies inquire whether entry would be timely, likely, and sufficient in its magnitude, character and scope to deter or counteract the anticompetitive harm of concern. If so, the relevant agreement ordinarily requires no further analysis.

As a general matter, the Agencies assess timeliness, likelihood, and sufficiency of committed entry under principles set forth in Section 3 of the *Horizontal Merger Guidelines*.⁴⁹ However, unlike mergers, competitor collaborations often restrict only certain business activities, while preserving competition among participants in other respects, and they may be designed to terminate after a limited duration. Consequently, the extent to which an agreement creates and enables identification of opportunities that would induce entry and the conditions under which ease of entry may deter or counteract anticompetitive harms may be more complex and less direct than for mergers and will vary somewhat according to the nature of the relevant agreement. For example, the likelihood of entry may be affected by what potential entrants believe about the probable duration of an anticompetitive agreement, the smaller the profit opportunities for potential entrants, and the lower the likelihood that it will induce committed entry. Examples of other differences are set forth below.

For certain collaborations, sufficiency of entry may be affected by the possibility that entrants will participate in the anticompetitive agreement. To the extent that such participation raises the amount of entry needed to deter or counteract anticompetitive harms, and assets required for entry are not adequately available for entrants to respond fully to their sales opportunities, or otherwise renders entry inadequate in magnitude, character or scope, sufficient entry may be more difficult to achieve.⁵⁰

⁴⁹ Committed entry is defined as new competition that requires expenditure of significant sunk costs of entry and exit. *See* Section 3.0 of the *Horizontal Merger Guidelines*.

⁵⁰ Under the same principles applied to production and marketing collaborations, the exercise of monopsony power by a buying collaboration may be deterred or counteracted by the entry of new purchasers. To the extent that collaborators reduce their purchases, they may create an opportunity for new buyers to make purchases without forcing the price of the input above pre-relevant agreement levels. Committed purchasing entry, defined as new purchasing competition that requires expenditure of significant sunk costs of entry and exit — such as a new steel factory built in response to a reduction in the price of iron ore — is analyzed under principles analogous to those articulated in Section 3 of the *Horizontal Merger Guidelines*. Under that analysis, the Agencies assess whether a monopsonistic price reduction is likely to attract committed purchasing entry, profitable at pre-relevant agreement prices, that would not have occurred before the relevant agreement at those same prices. (Uncommitted new buyers are identified as participants in the relevant market if their demand responses to a price decrease are likely to occur within one year and without the expenditure of significant sunk costs of entry and exit. *See id.* at Sections 1.32 and 1.41.)

In the context of research and development collaborations, widespread availability of R&D capabilities and the large gains that may accrue to successful innovators often suggest a high likelihood that entry will deter or counteract anticompetitive reductions of R&D efforts. Nonetheless, such conditions do not always pertain, and the Agencies ask whether entry may deter or counteract anticompetitive R&D reductions, taking into account the likelihood, timeliness, and sufficiency of entry.

To be timely, entry must be sufficiently prompt to deter or counteract such harms. The Agencies evaluate the likelihood of entry based on the extent to which potential entrants have (1) core competencies (and the ability to acquire any necessary specialized assets) that give them the ability to enter into competing R&D and (2) incentives to enter into competing R&D. The sufficiency of entry depends on whether the character and scope of the entrants' R&D efforts are close enough to the reduced R&D efforts to be likely to achieve similar innovations in the same time frame or otherwise to render a collaborative reduction of R&D unprofitable.

3.36 Identifying Procompetitive Benefits of the Collaboration

Competition usually spurs firms to achieve efficiencies internally. Nevertheless, as explained above, competitor collaborations have the potential to generate significant efficiencies that benefit consumers in a variety of ways. For example, a competitor collaboration may enable firms to offer goods or services that are cheaper, more valuable to consumers, or brought to market faster than would otherwise be possible. Efficiency gains from competitor collaborations often stem from combinations of different capabilities or resources. *See supra* Section 2.1. Indeed, the primary benefit of competitor collaborations to the economy is their potential to generate such efficiencies.

Efficiencies generated through a competitor collaboration can enhance the ability and incentive of the collaboration and its participants to compete, which may result in lower prices, improved quality, enhanced service, or new products. For example, through collaboration, competitors may be able to produce an input more efficiently than any one participant could individually; such collaboration-generated efficiencies may enhance competition by permitting two or more ineffective (*e.g.*, high cost) participants to become more effective, lower cost competitors. Even when efficiencies generated through a competitor collaboration enhance the collaboration's or the participants' ability to compete, however, a competitor collaboration may have other effects that may lessen competition and ultimately may make the relevant agreement anticompetitive.

If the Agencies conclude that the relevant agreement has caused, or is likely to cause, anticompetitive harm, they consider whether the agreement is reasonably necessary to achieve "cognizable efficiencies." "Cognizable efficiencies" are efficiencies that have been verified by the Agencies, that do not arise from anticompetitive reductions in output or service, and that cannot be achieved through practical, significantly less restrictive means. *See infra* Sections 3.36(a) and 3.36(b). Cognizable efficiencies are assessed net of costs produced by the competitor collaboration or incurred in achieving those efficiencies.

3.36(a) Cognizable Efficiencies Must Be Verifiable and Potentially Procompetitive

Efficiencies are difficult to verify and quantify, in part because much of the information relating to efficiencies is uniquely in the possession of the collaboration's participants. The participants must substantiate efficiency claims so that the Agencies can verify by reasonable means the likelihood and magnitude of each asserted efficiency; how and when each would be achieved; any costs of doing so; how each would enhance the collaboration's or its participants' ability and incentive to compete; and why the relevant agreement is reasonably necessary to achieve the claimed efficiencies (*see* Section 3.36 (b)). Efficiency claims are not considered if they are vague or speculative or otherwise cannot be verified by reasonable means.

Moreover, cognizable efficiencies must be potentially procompetitive. Some asserted efficiencies, such as those premised on the notion that competition itself is unreasonable, are insufficient as a matter of law. Similarly, cost savings that arise from anticompetitive output or service reductions are not treated as cognizable efficiencies. *See* Example 9.

3.36(b) Reasonable Necessity and Less Restrictive Alternatives

The Agencies consider only those efficiencies for which the relevant agreement is reasonably necessary. An agreement may be "reasonably necessary" without being essential. However, if the participants could have achieved or could achieve similar efficiencies by practical, significantly less restrictive means, then the Agencies conclude that the relevant agreement is not reasonably necessary to their achievement. In making this assessment, the Agencies consider only alternatives that are practical in the business situation faced by the participants; the Agencies do not search for a theoretically less restrictive alternative that is not realistic given business realities.

The reasonable necessity of an agreement may depend upon the market context and upon the duration of the agreement. An agreement that may be justified by the needs of a new entrant, for example, may not be reasonably necessary to achieve cognizable efficiencies in different market circumstances. The reasonable necessity of an agreement also may depend on whether it deters individual participants from undertaking free riding or other opportunistic conduct that could reduce significantly the ability of the collaboration to achieve cognizable efficiencies. Collaborations sometimes include agreements to discourage any one participant from appropriating an undue share of the fruits of the collaboration or to align participants' incentives to encourage cooperation in achieving the efficiency goals of the collaboration. The Agencies assess whether such agreements are reasonably necessary to deter opportunistic conduct that otherwise would likely prevent the achievement of cognizable efficiencies. *See* Example 10.

3.37 Overall Competitive Effect

If the relevant agreement is reasonably necessary to achieve cognizable efficiencies, the Agencies

assess the likelihood and magnitude of cognizable efficiencies and anticompetitive harms to determine the agreement's overall actual or likely effect on competition in the relevant market. To make the requisite determination, the Agencies consider whether cognizable efficiencies likely would be sufficient to offset the potential of the agreement to harm consumers in the relevant market, for example, by preventing price increases.⁵¹

The Agencies' comparison of cognizable efficiencies and anticompetitive harms is necessarily an approximate judgment. In assessing the overall competitive effect of an agreement, the Agencies consider the magnitude and likelihood of both the anticompetitive harms and cognizable efficiencies from the relevant agreement. The likelihood and magnitude of anticompetitive harms in a particular case may be insignificant compared to the expected cognizable efficiencies, or vice versa. As the expected anticompetitive harm of the agreement increases, the Agencies require evidence establishing a greater level of expected cognizable efficiencies in order to avoid the conclusion that the agreement will have an anticompetitive effect overall. When the anticompetitive harm of the agreement is likely to be particularly large, extraordinarily great cognizable efficiencies would be necessary to prevent the agreement from having an anticompetitive effect overall.

SECTION 4: ANTITRUST SAFETY ZONES

4.1 Overview

Because competitor collaborations are often procompetitive, the Agencies believe that "safety zones" are useful in order to encourage such activity. The safety zones set out below are designed to provide participants in a competitor collaboration with a degree of certainty in those situations in which anticompetitive effects are so unlikely that the Agencies presume the arrangements to be lawful without inquiring into particular circumstances. They are not intended to discourage competitor collaborations that fall outside the safety zones.

The Agencies emphasize that competitor collaborations are not anticompetitive merely because they fall outside the safety zones. Indeed, many competitor collaborations falling outside the safety zones are procompetitive or competitively neutral. The Agencies analyze arrangements outside the safety zones based on the principles outlined in Section 3 above.

The following sections articulate two safety zones. Section 4.2 sets out a general safety zone

⁵¹ In most cases, the Agencies' enforcement decisions depend on their analysis of the overall effect of the relevant agreement over the short term. The Agencies also will consider the effects of cognizable efficiencies with no short-term, direct effect on prices in the relevant market. Delayed benefits from the efficiencies (due to delay in the achievement of, or the realization of consumer benefits from, the efficiencies) will be given less weight because they are less proximate and more difficult to predict.

applicable to any competitor collaboration.⁵² Section 4.3 establishes a safety zone applicable to research and development collaborations whose competitive effects are analyzed within an innovation market. These safety zones are intended to supplement safety zone provisions in the Agencies' other guidelines and statements of enforcement policy.⁵³

4.2 Safety Zone for Competitor Collaborations in General

Absent extraordinary circumstances, the Agencies do not challenge a competitor collaboration when the market shares of the collaboration and its participants collectively account for no more than twenty percent of each relevant market in which competition may be affected.⁵⁴ The safety zone, however, does not apply to agreements that are per se illegal, or that would be challenged without a detailed market analysis,⁵⁵ or to competitor collaborations to which a merger analysis is applied.⁵⁶

4.3 Safety Zone for Research and Development Competition Analyzed in Terms of Innovation Markets

Absent extraordinary circumstances, the Agencies do not challenge a competitor collaboration on the basis of effects on competition in an innovation market where three or more independently controlled research efforts in addition to those of the collaboration possess the required

⁵² See Sections 1.1 and 1.3 above.

⁵³ The Agencies have articulated antitrust safety zones in *Health Care Statements* 7 & 8 and the *Intellectual Property Guidelines*, as well as in the *Horizontal Merger Guidelines*. The antitrust safety zones in these other guidelines relate to particular facts in a specific industry or to particular types of transactions.

⁵⁴ For purposes of the safety zone, the Agencies consider the combined market shares of the participants and the collaboration. For example, with a collaboration among two competitors where each participant individually holds a 6 percent market share in the relevant market and the collaboration separately holds a 3 percent market share in the relevant market, the combined market share in the relevant market for purposes of the safety zone would be 15 percent. This collaboration, therefore, would fall within the safety zone. However, if the collaboration involved three competitors, each with a 6 percent market share in the relevant market, the combined market share in the relevant market for purposes of the safety zone would be 21 percent, and the collaboration would fall outside the safety zone. Including market shares of the participants takes into account possible spillover effects on competition within the relevant market among the participants and their collaboration.

⁵⁵ See supra notes 27-29 and accompanying text in Section 3.3.

⁵⁶ See Section 1.3 above.

specialized assets or characteristics and the incentive to engage in R&D that is a close substitute for the R&D activity of the collaboration. In determining whether independently controlled R&D efforts are close substitutes, the Agencies consider, among other things, the nature, scope, and magnitude of the R&D efforts; their access to financial support; their access to intellectual property, skilled personnel, or other specialized assets; their timing; and their ability, either acting alone or through others, to successfully commercialize innovations. The antitrust safety zone does not apply to agreements that are per se illegal, or that would be challenged without a detailed market analysis,⁵⁷ or to competitor collaborations to which a merger analysis is applied.⁵⁸

⁵⁷ See supra notes 27-29 and accompanying text in Section 3.3.

⁵⁸ See Section 1.3 above.

Appendix

Section 1.3

Example 1 (Competitor Collaboration/Merger)

Facts

Two oil companies agree to integrate all of their refining and refined product marketing operations. Under terms of the agreement, the collaboration will expire after twelve years; prior to that expiration date, it may be terminated by either participant on six months' prior notice. The two oil companies maintain separate crude oil production operations.

Analysis

The formation of the collaboration involves an efficiency-enhancing integration of operations in the refining and refined product markets, and the integration eliminates all competition between the participants in those markets. The evaluating Agency likely would conclude that expiration after twelve years does not constitute termination "within a sufficiently limited period." The participants' entitlement to terminate the collaboration at any time after giving prior notice is not termination by the collaboration's "own specific and express terms." Based on the facts presented, the evaluating Agency likely would analyze the collaboration under the *Horizontal Merger Guidelines*, rather than as a competitor collaboration under these Guidelines. Any agreements restricting competition on crude oil production would be analyzed under these Guidelines.

Section 2.3

Example 2 (Analysis of Individual Agreements/Set of Agreements)

Facts

Two firms enter a joint venture to develop and produce a new software product to be sold independently by the participants. The product will be useful in two areas, biotechnology research and pharmaceuticals research, but doing business with each of the two classes of purchasers would require a different distribution network and a separate marketing campaign. Successful penetration of one market is likely to stimulate sales in the other by enhancing the reputation of the software and by facilitating the ability of biotechnology and pharmaceutical researchers to use the fruits of each other's efforts. Although the software is to be marketed independently by the participants rather than by the joint venture, the participants agree that one will sell only to biotechnology researchers and the other will sell only to pharmaceutical researchers. The participants also agree to fix the maximum price that either firm may charge. The parties assert that the combination of these two requirements is necessary for the successful marketing of the new product. They argue that the market allocation provides each participant with adequate incentives to commercialize the product in its sector without fear that the other participant will free-ride on its efforts and that the maximum price prevents either participant from unduly exploiting its sector of the market to the detriment of sales efforts in the other sector.

Analysis

The evaluating Agency would assess overall competitive effects associated with the collaboration in its entirety and with individual agreements, such as the agreement to allocate markets, the agreement to fix maximum prices, and any of the sundry other agreements associated with joint development and production and independent marketing of the software. From the facts presented, it appears that the agreements to allocate markets and to fix maximum prices may be so intertwined that their benefits and harms "cannot meaningfully be isolated." The two agreements arguably operate together to ensure a particular blend of incentives to achieve the potential procompetitive benefits of successful commercialization of the new product. Moreover, the effects of the agreement to fix maximum prices may mitigate the price effects of the agreement to allocate markets. Based on the facts presented, the evaluating Agency likely would conclude that the agreements to allocate markets and to fix maximum prices should be analyzed as a whole.

Section 2.4

Example 3 (Time of Possible Harm to Competition)

Facts

A group of 25 small-to-mid-size banks formed a joint venture to establish an automatic teller machine network. To ensure sufficient business to justify launching the venture, the joint venture agreement specified that participants would not participate in any other ATM networks. Numerous other ATM networks were forming in roughly the same time period.

Over time, the joint venture expanded by adding more and more banks, and the number of its competitors fell. Now, ten years after formation, the joint venture has 900 member banks and controls 60% of the ATM outlets in a relevant geographic market. Following complaints from consumers that ATM fees have rapidly escalated, the evaluating Agency assesses the rule barring participation in other ATM networks, which now binds 900 banks.

Analysis

The circumstances in which the venture operates have changed over time, and the evaluating Agency would determine whether the exclusivity rule now harms competition. In assessing the exclusivity rule's competitive effect, the evaluating Agency would take account of the

collaboration's substantial current market share and any procompetitive benefits of exclusivity under present circumstances, along with other factors discussed in Section 3. The Agencies would consider whether significant sunk investments were made in reliance on the exclusivity rule.

Section 3.2

Example 4 (Agreement Not to Compete on Price)

Facts

Net-Business and Net-Company are two start-up companies. They independently developed, and have begun selling in competition with one another, software for the networks that link users within a particular business to each other and, in some cases, to entities outside the business. Both Net-Business and Net-Company were formed by computer specialists with no prior business expertise, and they are having trouble implementing marketing strategies, distributing their inventory, and managing their sales forces. The two companies decide to form a partnership joint venture, NET-FIRM, whose sole function will be to market and distribute the network software products of Net-Business and Net-Company. NET-FIRM will be the exclusive marketer of network software produced by Net-Business and Net-Company. Net-Business and Net-Company will each have 50% control of NET-FIRM, but each will derive profits from NET-FIRM in proportion to the revenues from sales of that partner's products. The documents setting up NET-FIRM specify that Net-Business and Net-Company will agree on the prices for the products that NET-FIRM will sell.

Analysis

Net-Business and Net-Company will agree on the prices at which NET-FIRM will sell their individually-produced software. The agreement is one "not to compete on price," and it is of a type that always or almost always tends to raise price or reduce output. The agreement to jointly set price may be challenged as per se illegal, unless it is reasonably related to, and reasonably necessary to achieve procompetitive benefits from, an efficiency-enhancing integration of economic activity.

Example 5 (Specialization without Integration)

Facts

Firm A and Firm B are two of only three producers of automobile carburetors. Minor engine variations from year to year, even within given models of a particular automobile manufacturer, require re-design of each year's carburetor and re-tooling for carburetor production. Firms A and B meet and agree that henceforth Firm A will design and produce carburetors only for automobile models of even-numbered years and Firm B will design and produce carburetors only for automobile automobile models of odd-numbered years. Some design and re-tooling costs would be saved,

but automobile manufacturers would face only two suppliers each year, rather than three.

Analysis

The agreement allocates sales by automobile model year and constitutes an agreement "not to compete on . . . output." The participants do not combine production; rather, the collaboration consists solely of an agreement *not* to produce certain carburetors. The mere coordination of decisions on output is not integration, and cost-savings without integration, such as the costs saved by refraining from design and production for any given model year, are not a basis for avoiding per se condemnation. The agreement is of a type so likely to harm competition and to have no significant benefits that particularized inquiry into its competitive effect is deemed by the antitrust laws not to be worth the time and expense that would be required. Consequently, the evaluating Agency likely would conclude that the agreement is per se illegal.

Example 6 (Efficiency-Enhancing Integration Present)

Facts

Compu-Max and Compu-Pro are two major producers of a variety of computer software. Each has a large, world-wide sales department. Each firm has developed and sold its own word-processing software. However, despite all efforts to develop a strong market presence in word processing, each firm has achieved only slightly more than a 10% market share, and neither is a major competitor to the two firms that dominate the word-processing software market.

Compu-Max and Compu-Pro determine that in light of their complementary areas of design expertise they could develop a markedly better word-processing program together than either can produce on its own. Compu-Max and Compu-Pro form a joint venture, WORD-FIRM, to jointly develop and market a new word-processing program, with expenses and profits to be split equally. Compu-Max and Compu-Pro both contribute to WORD-FIRM software developers experienced with word processing.

Analysis

Compu-Max and Compu-Pro have combined their word-processing design efforts, reflecting complementary areas of design expertise, in a common endeavor to develop new word-processing software that they could not have developed separately. Each participant has contributed significant assets – the time and know-how of its word-processing software developers – to the joint effort. Consequently, the evaluating Agency likely would conclude that the joint word-processing software development project is an efficiency-enhancing integration of economic activity that promotes procompetitive benefits.

Example 7 (Efficiency-Enhancing Integration Absent)

Facts

Each of the three major producers of flashlight batteries has a patent on a process for manufacturing a revolutionary new flashlight battery -- the Century Battery -- that would last 100 years without requiring recharging or replacement. There is little chance that another firm could produce such a battery without infringing one of the patents. Based on consumer surveys, each firm believes that aggregate profits will be less if all three sold the Century Battery than if all three sold only conventional batteries, but that any one firm could maximize profits by being the first to introduce a Century Battery. All three are capable of introducing the Century Battery within two years, although it is uncertain who would be first to market.

One component in all conventional batteries is a copper widget. An essential element in each producers' Century Battery would be a zinc, rather than a copper widget. Instead of introducing the Century Battery, the three producers agree that their batteries will use only copper widgets. Adherence to the agreement precludes any of the producers from introducing a Century Battery.

Analysis

The agreement to use only copper widgets is merely an agreement not to produce any zinc-based batteries, in particular, the Century Battery. It is "an agreement not to compete on . . . output" and is "of a type that always or almost always tends to raise price or reduce output." The participants do not collaborate to perform any business functions, and there are no procompetitive benefits from an efficiency-enhancing integration of economic activity. The evaluating Agency likely would challenge the agreement to use only copper widgets as per se illegal.

Section 3.3

Example 8 (Rule-of-Reason: Agreement Quickly Exculpated)

Facts

Under the facts of Example 4, Net-Business and Net-Company jointly market their independentlyproduced network software products through NET-FIRM. Those facts are changed in one respect: rather than jointly setting the prices of their products, Net-Business and Net-Company will each independently specify the prices at which its products are to be sold by NET-FIRM. The participants explicitly agree that each company will decide on the prices for its own software independently of the other company. The collaboration also includes a requirement that NET-FIRM compile and transmit to each participant quarterly reports summarizing any comments received from customers in the course of NET-FIRM's marketing efforts regarding the desirable/undesirable features of and desirable improvements to (1) that participant's product and (2) network software in general. Sufficient provisions are included to prevent the companyspecific information reported to one participant from being disclosed to the other, and those provisions are followed. The information pertaining to network software in general is to be reported simultaneously to both participants.

Analysis

Under these revised facts, there is no agreement "not to compete on price or output." Absent any agreement of a type that always or almost always tends to raise price or reduce output, and absent any subsequent conduct suggesting that the firms did not follow their explicit agreement to set prices independently, no aspect of the partnership arrangement might be subjected to per se analysis. Analysis would continue under the rule of reason.

The information disclosure arrangements provide for the sharing of a very limited category of information: customer-response data pertaining to network software in general. Collection and sharing of information of this nature is unlikely to increase the ability or incentive of Net-Business or Net-Company to raise price or reduce output, quality, service, or innovation. There is no evidence that the disclosure arrangements have caused anticompetitive harm and no evidence that the prohibitions against disclosure of firm-specific information have been violated. Under any plausible relevant market definition, Net-Business and Net-Company have small market shares, and there is no other evidence to suggest that they have market power. In light of these facts, the evaluating Agency would refrain from further investigation.

Section 3.36(a)

Example 9 (Cost Savings from Anticompetitive Output or Service Reductions)

Facts

Two widget manufacturers enter a marketing collaboration. Each will continue to manufacture and set the price for its own widget, but the widgets will be promoted by a joint sales force. The two manufacturers conclude that through this collaboration they can increase their profits using only half of their aggregate pre-collaboration sales forces by (1) taking advantage of economies of scale -- presenting both widgets during the same customer call -- and (2) refraining from time-consuming demonstrations highlighting the relative advantages of one manufacturer's widgets over the other manufacturer's widgets. Prior to their collaboration, both manufacturers had engaged in the demonstrations.

Analysis

The savings attributable to economies of scale would be cognizable efficiencies. In contrast, eliminating demonstrations that highlight the relative advantages of one manufacturer's widgets over the other manufacturer's widgets deprives customers of information useful to their decision making. Cost savings from this source arise from an anticompetitive output or service reduction and would not be cognizable efficiencies.

Section 3.36(b)

Example 10 (Efficiencies from Restrictions on Competitive Independence)

Facts

Under the facts of Example 6, Compu-Max and Compu-Pro decide to collaborate on developing and marketing word-processing software. The firms agree that neither one will engage in R&D for designing word-processing software outside of their WORD-FIRM joint venture. Compu-Max papers drafted during the negotiations cite the concern that absent a restriction on outside word-processing R&D, Compu-Pro might withhold its best ideas, use the joint venture to learn Compu-Max's approaches to design problems, and then use that information to design an improved word-processing software product on its own. Compu-Pro's files contain similar documents regarding Compu-Max.

Compu-Max and Compu-Pro further agree that neither will sell its previously designed wordprocessing program once their jointly developed product is ready to be introduced. Papers in both firms' files, dating from the time of the negotiations, state that this latter restraint was designed to foster greater trust between the participants and thereby enable the collaboration to function more smoothly. As further support, the parties point to a recent failed collaboration involving other firms who sought to collaborate on developing and selling a new spread-sheet program while independently marketing their older spread-sheet software.

Analysis

The restraints on outside R&D efforts and on outside sales both restrict the competitive independence of the participants and could cause competitive harm. The evaluating Agency would inquire whether each restraint is reasonably necessary to achieve cognizable efficiencies. In the given context, that inquiry would entail an assessment of whether, by aligning the participants' incentives, the restraints in fact are reasonably necessary to deter opportunistic conduct that otherwise would likely prevent achieving cognizable efficiency goals of the collaboration.

With respect to the limitation on independent R&D efforts, possible alternatives might include agreements specifying the level and quality of each participant's R&D contributions to WORD-FIRM or requiring the sharing of all relevant R&D. The evaluating Agency would assess whether any alternatives would permit each participant to adequately monitor the scope and quality of the other's R&D contributions and whether they would effectively prevent the misappropriation of the other participant's know-how. In some circumstances, there may be no "practical, significantly less restrictive" alternative.

Although the agreement prohibiting outside sales might be challenged as per se illegal if not reasonably necessary for achieving the procompetitive benefits of the integration discussed in Example 6, the evaluating Agency likely would analyze the agreement under the rule of reason if

it could not adequately assess the claim of reasonable necessity through limited factual inquiry. As a general matter, participants' contributions of marketing assets to the collaboration could more readily be monitored than their contributions of know-how, and neither participant may be capable of misappropriating the other's marketing contributions as readily as it could misappropriate know-how. Consequently, the specification and monitoring of each participant's marketing contributions could be a "practical, significantly less restrictive" alternative to prohibiting outside sales of pre-existing products. The evaluating Agency, however, would examine the experiences of the failed spread-sheet collaboration and any other facts presented by the parties to better assess whether such specification and monitoring would likely enable the achievement of cognizable efficiencies.