ANTITRUST GUIDELINES FOR HORIZONTAL COLLABORATIONS AMONG COMPETITORS:

ARGENTINA, CHILE, COLOMBIA, COSTA RICA, ECUADOR, EL SALVADOR, GUATEMALA, HONDURAS, MÉXICO, NICARAGUA, PERÚ AND REPÚPLICA DOMINICANA

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1. EXECUTIVE SUMMARY

This report was commissioned as a reference paper by the Regional Competition Center for Latin America, through the General Secretariat, and funded by the World Bank. Its purpose is to recommend an analytical framework for the assessment of horizontal agreements among competitors based on best international practices.

The term "competitor collaboration," "collaboration," "agreement" or "exchange of information" is defined as a set of agreements or exchanges of information among competitors which allows the pursuit of economic activity, and it also extends to the economic activity itself resulting from such collaboration. The term "competitor" refers to both actual and potential competitor. The collaboration has a horizontal nature if it is entered into by competitors. The most common agreements focus on research and development, production, purchasing, and processing, distribution and marketing.

Horizontal agreements among competitors can lead to significant economic benefits which in turn can translate into significant consumer benefits, especially when such agreements take advantage of complementary skills. These agreements may allow for the development of new products, enhance the speed of development of such products, increase the quality and variety of options available, save costs or share risks. However, horizontal agreements may also lead to competition concerns. That is the case when they facilitate practices which fix prices or output, fix the allocation of markets or customers, or foreclose future competitors. Such agreements are likely to lead to consumer losses through increased prices or reduced quality, quantity or variety of output; they may also stifle innovation and new product development.

This report is designed to serve two purposes. First, it is intended to provide the Antitrust Agencies of Argentina, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Perú and República Dominicana, ("Agencies") with guiding principles and a general framework for analyzing horizontal collaborations among competitors. Second, it is intended to provide guidance to businesses and their legal advisors on how the Agencies may wish to assess the legality of these formal or informal agreements.

The analytical framework herein proposed is based on economic and legal principles for assessing horizontal agreements and the contexts in which they take place; it applies to agreements which are not per se illegal. The analysis of agreements under the rule of

reason is based upon best international practices, including those of the U.S. Department of Justice and the Federal Trade Commission, as well as the European Commission.[1]

A key economic principle in the analysis of these agreements is the extent to which the parties to the agreement have market power, or the extent to which the agreement enables or enhances the existence of such market power.

The final assessment of the competitive effect of a horizontal agreement among competitors under the rule of reason will be based on the facts of the case at hand. Several factors will be important in this analysis, including:

- The nature and content of the agreement;
- The possibility that the agreement may limit independent decision making by the parties through the control of key production factors or financial interests, or through the facilitation of coordination of market price or output;
- Particular features of the information exchanged between the parties in the context of the agreement, such as:
  - Parties' intent in sharing the information;
  - Nature, quantity and strategic importance of the information exchanged;
  - Age of the data exchanged;
  - Whether the information is exchanged publicly or privately;
  - Whether the information exchanged contains aggregate or individual information;
  - Whether the information exchanged involves individual current and future information or individual past information;
  - Whether the information exchanged involves individual data on prices and volumes or individual data on demand and costs;
  - Structure, control and frequency of the exchange;
  - Safeguards adoption by the parties;
- The relevant markets affected by the collaboration;

[1] European Commission, 2011. "Guidelines on the applicability of article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements," *Official Journal of the European Union,* available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2011:011:0001:0072:EN:PDF; and Federal Trade Commission and U.S. Department of Justice, 2000. "Antitrust Guidelines for Collaborations Among Competitors," available at http://www.ftc.gov/os/2000/04/ftcdojguidelines.pdf.

- The market shares and market concentration;
- The economic factors limiting the likelihood that the agreement will facilitate a collusive outcome such as:
    - The number of firms;
    - Homogeneity of the product;
    - Symmetry among competitors;
    - Market transparency;
    - Market complexity;
    - Stability in demand conditions;
    - Multimarket contact;
    - Barriers to entry;
    - Low benefits to cheating;
- Other factors influencing the likelihood that the agreement will facilitate a collusive outcome, including:
    - Exclusivity;
    - Control over assets;
    - Financial interests in the collaboration;
    - Control of the collaboration's key competitive decision making;
    - Likelihood of anticompetitive information;
    - Duration;
- The likelihood of entry;
- The features of the exchanges of information among competitors, both multilateral and unilateral outside of an explicit agreement which may facilitate a collusive outcome;
- The efficiencies generated;
- The reasonable necessity of the agreement to achieve the claimed efficiencies; and
- The overall competitive effect of the agreement.

The analytical framework put forward in the proposed guidelines represents a recommendation on how competition authorities may wish to analyze these collaborations; it does not necessarily reflect the way in which any particular competition authority may decide to proceed with such an assessment.

2. INTRODUCTION

There are a variety of legitimate reasons why competitors may need or simply wish to collaborate. Firms may collaborate in order to finance innovation and improve the quality or variety of their existing products, to develop new and superior products, to expand to new markets, or to improve efficiency and lower costs. The benefits to consumers from these collaborations can be significant, in particular if they are complementary across the parties. But such benefits notwithstanding, these agreements may also lead to competitive harm.

The new proposed "Antitrust Guidelines for Horizontal Collaborations Among Competitors: Argentina, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Perú and República Dominicana," ("Guidelines") provides general recommendations on how Antitrust Agencies ("Agencies") in the respective countries may wish to analyze collaborations among competitors under their respective Antitrust Laws. The Guidelines follow best international practices particularly by the Federal Trade Commission and U.S. Department of Justice, and the European Commission. They advise on a possible analytical framework for businesses to assess the likelihood of an antitrust challenge to a particular collaboration among competitors.

The proposed framework is primarily based on legal and economic criteria for analyzing an agreement and the context in which it is established, and it is in no way binding on any of the Agencies. By providing guidance on a general framework that the various jurisdictions may consider in their analyses of these collaborations, these Guidelines hope to contribute to higher transparency and predictability of antitrust assessment of collaborations among competitors. Hence, this report also hopes to encourage procompetitive collaborations while deterring anticompetitive ones.

3. HARDCORE CARTELS AND THE *PER SE* RULE

So-called hardcore cartels are agreements related to market division, quantity restriction, price fixing and bid-rigging which directly harm consumers. These agreements are per se illegal in ten out of the twelve countries for which the recommendations put forward in this report apply (the exceptions being Argentina and Chile). These agreements among competitors may be related to production, processing, distribution, purchasing or marketing, but their object or effect is the setting, raising, rigging or manipulation of the price of the good or service in a particular market in which the agreement operates or the prices of goods or services in other markets affected by the agreement. Such collaborations

could also take the form of exchanges of information without reaching a written agreement among the involved parties.

These Guidelines do not relate to hardcore cartels. Instead they relate to collaborations among competitors, occurring either within or outside of an explicit agreement, for which potential benefits to consumers are perceived while concerns of anticompetitive effects are raised. Such collaborations should be analyzed under the rule of reason approach, for which the Agencies may choose to follow a general analytical framework of assessment similar to the one put forward in this report. Given that the current report contains mere recommendations and that there is variation across countries in their respective antitrust laws, these guidelines are not expected to provide an exhaustive description of all of the factors each individual Agency may decide to consider during its analysis of such collaborations.

4. PURPOSE, DEFINITIONS AND OVERVIEW

4.1 PURPOSE AND DEFINITIONS

The current Guidelines provide advice on how antitrust agencies in Argentina, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Perú and República Dominicana may wish to set their future standards on the assessment of competitor collaborations and their competitive effect. By setting forward recommendations on a proposed analytical framework for antitrust challenge, these Guidelines hope to contribute to the increased predictability of enforcement actions by the Agencies, and thereby encourage procompetitive collaborations while discouraging those which are almost surely or likely to be challenged.

These Guidelines also put forward a possible de minimis rule on the combined market share of the participating parties below which the collaboration may be presumed to be lawful without further inquiries into particular circumstances.

Of course it is not feasible to elaborate any and every possible collaboration or disclosure agreement; the Agencies will necessarily exert judgment and discretion, and follow their specific antitrust laws when deciding whether and to what extent to apply the framework herein described.

The term “competitor collaboration,” “collaboration,” “agreement” or “exchange of information” is defined as a set of agreements or exchanges of information among competitors which allow the pursuit of economic activity, and it also extends to the

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economic activity itself resulting from such collaboration. The term “competitor” refers to both actual and potential competitors.[2]

The collaboration has a horizontal nature because it is entered into by competitors. It most commonly involves at least one of the following business activities: research and development (“R&D”), production, processing, marketing, distribution, sales, purchasing, and bidding. It may be either explicit in the form of a formal written or oral agreement, or implicit outside of the context of a formal agreement.

The term “competitively sensitive information” and “strategically sensitive information” are used interchangeably and refer to company-specific confidential information related to current or future actions, plans and strategies, including on pricing, production, costs, supply, demand, customers, bidding, innovation and other.

Throughout these Guidelines, the term “anticompetitive effect” or “anticompetitive harm” refers only to the agreement’s adverse competitive effects without considering any favorable effects which may obtain. Similarly, the term “procompetitive effect” or “procompetitive benefit” refers only to the agreement’s favorable competitive effects without considering any adverse competitive effects. The terms “overall competitive effect” or “competitive effects” are used when considering both the anticompetitive and the procompetitive effects.

4.2 OVERVIEW OF THE ANALYTICAL FRAMEWORK

The assessment of an information exchange among competitors under the relevant laws should consist of two steps. The first step is to determine whether the exchange of information or agreement is of the type covered by the respective antitrust laws or of any other type which either always or almost always produces an increase in price and/or reduction in output. Such agreements are per se illegal in most of the countries, and their claimed business aims and overall competitive effects will not be relevant. The framework herein presented does not concern per se illegal collaborations.

In the second step, agreements not falling in the above category are analyzed. Such agreements are likely to produce procompetitive effects, but may also induce anticompetitive effects. These agreements are subject to the rule of reason, and should be investigated to determine their likely overall competitive effect. The factual inquiry undertaken by the Agencies will require flexibility as the nature of the agreement and the market conditions may significantly vary from one case to another. Each case should be analyzed on the basis of its own facts.

[2] This does not exclude from consideration other relationships between firms such as buyer and seller.

A summary of the questions and factors that Agencies may wish to consider when analyzing an agreement among competitors is presented below. These are developed in more detail in the following sections.

4.2.1 AGREEMENTS CHALLENGED AS PER SE *ILLEGAL*

Agreements directly violating each of the jurisdictions' articles related to hardcore cartels are per se illegal, with the exception of Argentina and Chile for which all agreements are analyzed under the rule of reason. There is a great overlap of these types of agreements across all jurisdictions.

As a general matter, such agreements include: agreements raising, rigging or manipulating prices; agreements reducing output by, for example, ceasing its production, distribution, purchase, or marketing or by transacting a limited volume of the products or services; agreements allocating markets through, for example, the division, distribution, allocation or imposition of portions or segments of an existing or forthcoming market; and any agreements setting, rigging or coordinating bids. Since these agreements are per se illegal, no further inquiry is required of their business purposes or anticompetitive, procompetitive and overall effects.

4.2.2 AGREEMENTS ANALYZED UNDER THE RULE OF REASON

Other agreements among competitors which relate to the integration of economic activity in which efficiency will be enhanced, and which therefore may be reasonably necessary to achieve such procompetitive effects, should be analyzed under a rule of reason so that their overall competitive effect can be determined.

The question to be addressed is whether these agreements are likely to produce anticompetitive effects in comparison to situations absent those agreements. When that is the case, the Agencies should balance out those anticompetitive effects against potential procompetitive effects to assess their overall effect. Under a rule of reason approach, a certain level of flexibility may be required in the analysis. An outline of the steps that the Agencies may decide to follow when analyzing such agreements is presented below.

The first step should be to examine the purpose of the agreement among competitors and the actual overall competitive effects the agreement may already have had, in case it has been in effect.

When the agreement is already in place, but either its nature or the absence of market power of the entities (or some other legitimate reason) is sufficient to explain why it has not displayed anticompetitive effects, the Agencies may not challenge the agreement. If, on the other hand, the agreement has produced anticompetitive effects or is reasonably expected to do so, the Agencies may wish to undertake analysis to determine the potential competitive effects of the agreement. The natural starting point is to determine whether the agreement creates or enhances the ability of the parties involved to influence market outcomes. Next, the Agencies should determine whether the agreement preserves the incentive and ability of the parties to compete independently. Finally, they should evaluate other market conditions to determine the likelihood of anticompetitive effects and their magnitude. The analysis contrasts the agreement's anticompetitive effects against its likely procompetitive effects. If the latter do not outweigh the former, the agreement should be challenged without having to undertake a detailed market analysis.

When the analysis indicates that anticompetitive harm is unlikely, the investigation should be concluded without consideration of procompetitive effects.

4.3 COMPETITOR COLLABORATIONS ENCOURAGED BY PUBLIC AUTHORITIES OR IN KEY PRODUCTS AND SERVICES SECTORS

In cases where competitor collaborations are encouraged though not necessarily required by public authorities to attain a specific public policy objective, such encouragement should not mean that the collaboration is permissible if it leads to a collusive outcome.

Exceptions to the above may exist when agreements between competitors in key product and service sectors are set to follow rules established by the public authorities, in other words, when these collaborations are required by the authorities. In such cases the restrictions to competition are not attributable to a hardcore cartel or to the autonomous conduct of the companies involved, but rather may be shielded from an infringement of the relevant articles. Nevertheless, exchanges of information among competitors which may be required to accomplish the public authorities' directives (such as, for example, price caps) may still be analyzed by the Agencies for their content and indispensability to the public authorities' directive. If the information exchange is found to be dispensable, it should be challenged under the rule of reason.

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4.4 COMPETITORS COLLABORATIONS DISTINCT FROM MERGERS

There are several ways in which competitive effects of collaborations among competitors can differ from those of mergers. Mergers typically end the competition among the merging parties in the relevant markets, while collaborations preserve some form of competition among participants. Additionally, mergers are permanent while collaborations have a limited duration; an R&D collaboration, for example, will persist only for the duration of the project.

Despite these differences, competitor collaborations may have features similar to mergers and produce similar competitive effects. In such cases, the Agencies may decide to analyze the collaboration following the same framework used when considering a merger between the parties in the respective jurisdictions. Among the features considered should be whether the collaboration terminates in a sufficiently limited time frame and full competition among the parties is in place.

5. GENERAL PRINCIPLES FOR EVALUATING HORIZONTAL COLLABORATIONS AMONG COMPETITORS

Information exchanges within or outside of the context of a formal agreement among competitors may be pro- or anti-competitive depending on a variety of factors. In some cases, these exchanges may not only be recommended but required for public companies, and/or by public entities.

An exchange of information can be conducted in different ways. Information may be directly shared between competitors or indirectly shared through a third party such as a market research organization or common suppliers or retailers. Information shared between competitors may be exchanged with or without a formal or explicit agreement.

As mentioned above, exchanges of information can certainly be procompetitive. They may generate market efficiencies when information is otherwise held asymmetrically. Firms may also improve their internal efficiencies by learning about competitors' best practices and benchmarking against them. These exchanges may allow improvements in inventory management, enabling faster delivery of products and better managing of unstable demand. Exchanges of information may also directly improve consumer welfare by empowering consumers with more information and reducing their search costs. And

certainly, exchanges of information may allow for the development of new and better products at a faster pace and in a more efficient manner.[3]

Of course, other types of formal agreements and informal exchanges of information may be anticompetitive. They may enhance knowledge of competitors' market positions and strategies, weaknesses and strengths, allowing tacit (or even explicit) collusion to the detriment of consumers.[4]

An exchange of information may produce overall procompetitive or anticompetitive effects depending on what type of uncertainty the exchange attempts to reduce (uncertainty over demand or over costs) and the nature of the competition in that market (competition on price or on quantity).[5]

The overall competitive effect of an information exchange, either within or outside of a formal horizontal agreement, depends not only on the particular characteristics of the market but also on the type of information exchanged. Exchanges of information which aim to fix prices or quantities, among other objects, are considered anticompetitive and in most of the countries are violations of the law. Collaborations that either facilitate the beginning of such practices, or provide the framework for monitoring the behavior of other cartel members, should be considered anticompetitive and not allowed to proceed.

5.1 PROCOMPETITIVE EFFECTS

There are several legitimate rationales for the exchange of information between competitors, which may be beneficial to consumers. These are of course recognized by Agencies. Such collaborations may enable faster research and development of new and

[3] *See*, among other studies focusing on circumstances under which such information exchanges may be pro-competitive, J. Padilla and M. Pagano, 1999. "Sharing Default Information as a Borrower Discipline Device," *European Economic Review,* 10, 1951-1980; *see* also R. Jensen, 2007. "The Digital Provide: Information (Technology), Market Performance, and Welfare in the South Indian Fisheries Sector," *The Quarterly Journal of Economics*, 122:3, 879-924.

[4] *See*, among others, M. Motta, 2004. *Competition Policy: Theory and Practice,* Cambridge University Press; and M. Ivaldi, B. Jullien, P. Rey, P. Seabright and J. Tirole, 2003. "The Economics of Tacit Collusion," *Report for DG Competition, European Commission*. For a recent and developing matter in which information exchanges among competitors have allegedly facilitated collusion and affected financial markets worldwide, *see* R. Abrantes-Metz, M. Kraten, A. Metz and G. Seow, 2012. "Libor Manipulation?" *Journal of Banking and Finance*, 36, 136-150, with first publicly available working paper dated August 2008; and R. Abrantes-Metz and A. Metz, 2012. "How Far Can Screens Go in Distinguishing Explicit from Tacit Collusion? New Evidence from the Libor Setting" CPI Antitrust Chronicle, March(1).

[5] *See*, K.-U. Kühn and X. Vives, 1995. "Information Exchanges among Firms and Their Impact on Competition," *Office for Official Publications of the European Community*.

better products or services, or they may allow goods to be sold more cheaply, brought to market faster, or sold in new markets.

Some information exchanges may also reduce uncertainty, leading to procompetitive benefits. Examples would include: (1) reducing demand uncertainty so that quantity and investment decisions may be more efficiently managed; and (2) revealing information about the market which may be used by consumers as a signal of product quality.

5.2 ANTICOMPETITIVE EFFECTS

Collaborations among competitors may harm competition and consumers, through the increased transparency and exchange of strategic information which may facilitate coordination of the participants' behavior. This may enhance their ability to raise prices or reduce output, and lower the quality or variety of the product or innovation below what would have existed in the absence of such an agreement.

The likelihood that such effects will occur depends on a variety of factors, including the nature and content of the agreement, and the extent to which the agreement may contribute to the creation, maintenance or strengthening of market power, or the use of such market power to the detriment of competition.

Agreements, either explicit or implicit, may be initiated unilaterally and can create the incentive for coordination through several mechanisms. One mechanism is for the firms to reach a common understanding of the terms of their coordination, even if tacitly, such as when there are exchanges of information on future pricing or other strategic intentions. A second mechanism is through the facilitation of monitoring of the behavior of those who may be coordinating, which in turn may increase the internal stability of such coordination. A third mechanism is through the enhancement of the stability of the coordinating group to the detriment of potential entrants. Such arrangements may also affect related markets in which the same parties are either actual or potential competitors.

Another possible anticompetitive effect of a collaboration is the foreclosure of either market participants horizontally competing in the same market or, in the case of vertically integrated firms, the enhanced market power to raise costs to their downstream rivals. Foreclosing rivals is a strong effect which should result only if the type of information exchanged is critical for competition, and such collaborations should not be allowed.

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The Agencies may take into account several factors when evaluating whether information exchanges among competitors are likely to raise antitrust concerns. Among these are: (1) whether the information is competitively sensitive such that its exchange will deleteriously impact prices, costs, output, business plans, or marketing strategies; (2) whether the information relates to future rather than past actions or decisions; and (3) whether the information reveals individual-firm level data rather than aggregate, anonymous data. Section 7 will analyze these and other factors in detail.

5.3 TIMING OF THE ASSESSMENT OF COMPETITIVE EFFECTS

Competitive effects of agreements among competitors may change with time. The Agencies should analyze the competitive effects at the time of possible harm to competition, which may either be at the beginning of the collaboration, or at a later time, however decided as appropriate.

6. THE MOST COMMON HORIZONTAL AGREEMENTS

This section contains a descriptive summary of some of the most common horizontal agreements among competitors. More detailed analyses on these types of agreements, and their main potential pro- and anticompetitive effects can be found in section 8.

6.1. RESEARCH AND DEVELOPMENT AGREEMENTS

Competitors may agree to collaborate on the research and development of products (R&D). These are some of the most common agreements among competitors, and they can take a variety of forms. They may relate to outsourcing of particular R&D activities, to joint improvement of existing products or technology, or to the development of completely new products. Any of these collaborations may take place under a joint agreement of otherwise separate parties or through a jointly controlled firm.

Typically these agreements between competitors allow for a quicker and more efficient R&D process for either an existing or a new product or technology through the complementary use of capabilities or other assets. This in turn allows for most of these agreements to be procompetitive and hence typically analyzed under a rule of reason. It is nevertheless possible for these agreements to cause anticompetitive harm, as they may create or increase market power, or facilitate its exercise either by limiting

individual decision making or by controlling competitively significant assets; additionally, they may present an opportunity to exchange information unrelated to the original agreements which possibly presenting anticompetitive concerns.

6.2. PRODUCTION AGREEMENTS

Production agreements can be procompetitive and take several forms, such as when firms jointly produce a particular good which benefits from efficiencies generated through the combination of complementarities and know-how.

However, these types of collaborations may also lead to anticompetitive harm when they refer to agreements on the level of output or price, on the access to key assets, or on particular features of the product such as quality or service. Such agreements may facilitate the increase of market power and limit independent decision making by the parties, either directly or indirectly, through the control of key assets influencing main decisions.

6.3. PURCHASING AGREEMENTS

Collaborations among competitors may relate to the joint purchase of inputs, and allow for significant cost savings by the parties through ordering centralization, the sharing of warehousing and distribution functions, or the achievement of other efficiencies.

Though these types of agreements do not usually raise antitrust concerns, they may nevertheless produce anticompetitive effects under two particular situations. First, parties to such collaborations may facilitate the increase of monopsony power (market power by buyers) allowing them to lower the price of the purchased input and potentially reduce the level of its output relative to the competitive ideal. Second, such collaborations may facilitate other collusive outcomes through the convergence of costs across the parties, or through the enhanced ability to monitor the other parties' output.

6.4. PROCESSING, DISTRIBUTION AND MARKETING AGREEMENTS

Parties individually or jointly producing a particular good or service may enter into collaborations to sell, distribute or promote their goods or services, and these collaborations may take many different forms.

Though these agreements may allow for cost savings and therefore the generation of efficiencies, they may also involve agreements on price, output, market shares, or other

relevant competitive features which may lead to anticompetitive harm. In addition, these types of agreements may also limit independent decision making through the combination of financial assets or interests. For example, in the presence of a marketing agreement, the parties may lack the incentive to actively compete in advertising campaigns.

7. FRAMEWORK FOR EVALUATING COLLABORATIONS AMONG COMPETITORS UNDER THE RULE OF REASON

7.1. INTRODUCTION

The factors and analyses recommended in this section are only relevant to agreements analyzed under a rule of reason in each of the countries. For Argentina and Chile, since there is no per se rule, section 7 would be relevant for the analyses of all horizontal collaborations among competitors.

7.2. RELEVANT FACTORS UNDER THE RULE OF REASON

This section explains in detail which factors the Agencies may decide to consider when assessing the overall competitive effect of collaborations among competitors. These relate to (a) the nature and the content of the relevant agreement; (b) the possibility of limiting independent decision making by the parties through the combination of the control of key production factors or financial interests, and through the facilitation of coordination of market price or output; (c) particular features of the information exchanged among the parties in the context of an horizontal agreement; (d) relevant markets affected by the collaboration; (e) market shares and market concentration; (f) economic factors influencing the likelihood that the agreement will facilitate collusion; (g) other factors influencing the likelihood that the agreement will facilitate collusion; (h) entry; (i) exchanges of information, both multilateral and unilateral, outside of an explicit agreement which facilitate tacit collusion; (i) efficiencies generated; (j) the reasonable necessity of the agreement; and (k) the overall competitive effect of the agreement.

7.2.1. NATURE AND CONTENT OF THE RELEVANT AGREEMENT

The nature and content of the relevant agreement refer to factors such as the area in which the agreement focuses (research and development, production, purchasing, processing, distribution and marketing, other), its objective, the competitive relationship between the parties and the extent to which their capabilities are combined. These will be relevant in assessing whether the agreement may cause anticompetitive effects.

There are several ways in which a horizontal collaboration may limit competition. It may impose exclusivity between the parties in the sense that they may be limited in their ability to compete against each other or against third parties, or it may limit independent decision making or incentive to compete independently in other ways. The agreement may also require the combined control by the parties of key assets to their economic activities, decisions on price or output, or other competitively sensitive variables. When that is the case, the agreement may create or increase the parties' market power or facilitate its exercise, to the detriment of competition. Additionally, an agreement may increase the likelihood of explicit or tacit collusion, either through the facilitation of practices such as the exchange of competitively sensitive information, or through an increase in market share.

For parties who were already collaborating prior to the relevant agreement, the agreement itself may induce more stability and robustness to such collaboration and hence increase the likelihood of future higher prices. In particular, agreement types involving for example the joint production or distribution of a significant proportion of the parties output may lead to a high degree of commonality of costs, and when other market conditions are also present this commonality may allow the parties to more easily coordinate market shares and output.

Anticompetitive concerns related to exclusionary practices may also occur in agreements in production, processing and distribution.

In addition, an agreement may benefit non-participant competitors by generally reducing competitive pressure, inducing them to profitably increase their prices in the relevant market. The likelihood that such a price increase may occur depends on a variety of factors which include (but are not limited to), whether the combined market share of the parties involved in the agreement is high, whether their products are close substitutes, whether there are limited choices for customers, whether the agreement impedes pre-agreement procompetitive conduct, whether competitors are unlikely to respond with an increase in output if prices were to increase, and whether any of the parties to the agreement represent an important competitive force in the relevant market.

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When analyzing the nature of the agreement, the Agencies may infer the likely anticompetitive effects based on objective facts, but they may also consider evidence based on the subjective intent of the participants. The Agencies may decide not to pursue a full analysis of the procompetitive effects of the agreement at this stage, unless it is reasonable to expect that the agreement will produce anticompetitive effects. The Agencies may also consider whether an existing agreement has already produced an anticompetitive effect, and when such an effect is found, the Agencies may decide to examine market power.

The fact that such agreements are being analyzed under the proposed framework according to a rule of reason, means that under this framework it was already determined that these agreements were not *per se* illegal, and that they appear likely to produce procompetitive effects from an efficiency-enhancing integration of economic activity.

7.2.1.(a) AGREEMENTS LIMITING DECISION-MAKING, COMBINING CONTROL OF KEY PRODUCTION FACTORS OR FINANCIAL INTERESTS, AND FACILITATING COORDINATION ON MARKET PRICE AND OUTPUT

Though any of the types of agreements described in section 6 may be procompetitive, they may also potentially harm competition through the elimination of independent decision making or the control of financial assets.

Additionally, some of these collaborations may allow the convergence of costs among the involved parties, namely the proportion of variable costs that the parties have in common. Such convergence would allow for easier coordination of market prices and output. This could be the case for example in joint production or distribution of goods when these represent a significant proportion of the participants' output.

Section 8 of these guidelines discusses examples of how such collaborations may be beneficial or harmful to consumers.

7.2.1.(b) AGREEMENTS FACILITATING COLLUSION

Each of the common types of collaborations discussed in section 6 may facilitate either explicit or tacit collusion. The supposed increase in transparency in the market due to the exchange of information among competitors can facilitate tacit alignment of companies' strategic behavior with the end result of

producing anticompetitive effects. This may occur essentially through three channels. The first is that the information exchanged may allow the parties to reach a common understanding on what their future strategies will be. That will be primarily the case when the agreement involves the exchange of information on future conduct such as production plans and prices. A second channel is through the increased internal stability of a collusive agreement, as it facilitates the detection and punishment of deviations from the agreement which would undermine collusion. A third channel is through the facilitation of the external stability of the collusive outcome, as it may increase the parties' ability to monitor the whole market and target possible new entrants. This concern is related to the possibility of exclusionary practices. The increase in concentration in the relevant market due to the agreement may also increase the likelihood of collusion among all of the firms in the market.

The possibility of collusion may be higher in production, processing, distribution and marketing agreements than in those related exclusively to R&D. Nevertheless, though an R&D agreement may be procompetitive, it may also present the opportunity for the parties to communicate and coordinate in other markets in which they have common interests, in turn facilitating collusive outcomes in those markets. This can also be true for the other types of agreements.

7.2.2. FEATURES OF THE INFORMATION EXCHANGED AS PART OF THE HORIZONTAL AGREEMENT

Exchanges of information take place in different contexts, within a formal agreement and outside of a formal agreement. They may also take place unilaterally of multilaterally (section 7.2.8). This section focuses on the features of the exchange of information which Agencies may wish to consider when analyzing the potential anticompetitive effect of an agreement.

Though some market characteristics may facilitate a successful cartel, exchanges of information may also enable companies to reach a collusive agreement in situations in which, under normal circumstances, that would be difficult to implement. Through increased transparency, reduced market complexity, reduced instability and compensation for market asymmetries, exchanges of information can assist in creating the market conditions for successful collusion which were previously absent, or enhance previously existing market conditions prone to collusion. Knowledge of competitors' market strategies or production may reduce independent decision

making and facilitate coordination among competitors with the end result of producing a collusive outcome.

When the information exchanged is part of a horizontal agreement, such as when the parties exchange information on costs in the context of a production agreement or information on clinical trials in the context of an R&D agreement, the assessment of such exchange of information should to be carried out in conjunction with the analysis of the agreement itself.

Exchanges of information may have a variety of procompetitive effects, potentially improving market efficiency at several levels. They may help improve situations of asymmetric information in which one of the parties involved in a transaction may have more information than the other party; they may reduce production costs by reducing inventories; they may accelerate the development of new and better products; they may improve companies internal efficiencies through their knowledge about competitors' practices; or they may also reduce the search costs of consumers.

The effects of the information exchanged among competitors depend on three sets of factors. The first refers to the characteristics of the information exchanged, which is the focus of the current section; the second relates to the characteristics of the market in which the information is exchanged (section 7.2.5); and the third refers to other relevant factors such as exclusivity, control of financial assets and decision making, and others (section 7.2.6).

The strongest factor in finding such an exchange illegal resides on actual evidence of its effects in the market such as significant price increases. Section 7.2.10 (b) describes how the Agencies may consider estimating the effects of agreements and exchanges of information. In the absence of such evidence of outcomes, various factors or criteria may be considered in order to determine the legitimacy of the information exchanged. Each factor by itself is unlikely to be sufficient to determine the illegality of the information exchanged, as most likely more than one factor needs to be in place for the exchange of information to have an anticompetitive effect. The suggested criteria are described below.

Market Characteristics

As discussed in section 7.2.5 below, these are relevant for the assessment of the impact of an exchange of information among competitors.

Parties Intent in Sharing the Information

The parties' intention when exchanging information should play an important role in the assessment of the exchange, even if the type of information exchanged may not seem the most strategically relevant. An exchange made with the intent to fix and stabilize prices would be illegal, while an exchange intended to prevent purchasers' manipulation of the bidding system would not be.

Nature, Quantity and Strategic Importance of the Information Exchanged

Particular types of data exchanges among competitors may be more likely than others to reduce strategic uncertainty in the market and to ease coordination between the parties by decreasing their incentive to compete. Strategic information may be related to prices, discounts, rebates, sales, customer lists, procurement bids, production costs, capacities, marketing plans, forecasts, investments and investment plans, technologies, and other. The strategic relevance of these exchanges of information may depend on the specific market context, the aggregation of the data and its age, how frequently it was exchanged, and the number of dimensions in which the involved firms compete. On the latter, if firms exchange information on one of their dimensions of competition but not on the remaining, it is likely that coordination at just that one dimension may be undercut by competition at the remaining dimensions.[6]

The Age of the Data Exchanged

The exchange of historical data is less likely to facilitate coordination between the parties than the exchange of information on projected prices and quantities. The older the data, the harder it is to be used to infer future conduct from a competitor, and also the less useful it is to serve as a monitoring scheme to potential deviations from coordination between competitors. The definition of historical data depends on the market at hand and its features. For example, if contracts in a particular industry are renegotiated only every two years, then data over the last one to two years would not be considered historical.

Information Exchanged Publicly vs. Privately

An information exchange is considered public rather than private when it is equally accessible to all market participants. The exchange of information in the public arena in general decreases the likelihood that it will be used as a way to coordinate behavior. Such information may be available publicly though not

[6] *See* C. Matutes and J. Padilla, 1994. "Shared ATM Networks and Banking Competition," *European Economic Review*, 5, 1113-1138.

freely, but as long as it can be easily and equally accessible by all market participants, it is considered publicly available.

In practical terms, it is not likely that the parties exchanging the information would find it advantageous to do so directly when such information was easily and publicly available to all interested parties. However, the public exchange of information may also in certain circumstances facilitate coordination through increased market transparency, signaling on future behavior, and ease in monitoring any deviations from a collusive outcome.

The analysis of the likelihood of anti-competitive effects of information exchanged privately instead of publicly will depend on factors such as the nature of the information, the likelihood that collusion may be occurring in that market, and the R&D nature of the market at hand, as efficiency enhancing exchanges of information are usually private.[7]

Aggregate vs. Individual Information

The exchange of aggregated data, defined as data in which the identification of individualized firms is not possible, is much less likely to produce anticompetitive effects than is the exchange of firm-level data. Efficiency benefits can most likely be obtained through the exchange of aggregate data, while the exchange of individual data raises the potential for a collusive outcome. In fact, the publication of aggregate data on costs, production, and average prices by trade associations or market intelligence companies may benefit suppliers and customers by allowing them a clearer picture of the market place, permitting more informed choices to be made, and allowing for a more efficient adaption to changing market conditions. The exchange of aggregate information should therefore not raise concerns unless other features are present such as highly concentrated markets or a history of collusion in those markets.

Exchange of Individual Current and Future Information vs. Individual Past Information

The exchange of individual current and future information on prices, quantities or strategic behavior potentially facilitating coordination, which is not public and which does not represent a price commitment to customers in that market,

[7] *See* W. Baumol, 1998. "When is Inter-firm Coordination Beneficial? The Case of Innovation," *International Journal of Industrial Organization*, 5, 727-737; as stated in this article, R&D cooperation between competitors typically takes place through bilateral exchanges of information, which in turn, generate pro-competitive effects.

increases the likelihood of collusion.[8] But it should also be noted that even a private exchange of information on future intentions will only have an anti-competitive effect if future market supply can react and adjust to the new information exchanged. That means that if supply conditions are already set by the time the information is exchanged, then no anti-competitive effect is likely to be generated.

Under these conditions, firms may still have the incentive to privately exchange information on future supply plans so that they can more efficiently allocate production across different plants in the presence of demand uncertainty, or to increase efficiency in markets of perishable goods. Additionally, if the exchange of future intentions enhances the level of investment and/or the likelihood that optimal investment levels will occur in an R&D intensive market, then such an exchange is likely to produce pro-competitive effects.[9]

On the other hand, the exchange of individual past information is not likely to enhance collusion unless it is a market where collusion is already likely due to, for example, a history of collusion. In such cases the exchange of past individual information may facilitate the monitoring of deviations from a collusive agreement. The exchange of past data may also facilitate the beginning of coordination in markets that are concentrated, symmetric, stable and involving homogeneous goods.[10]

Individual Data on Prices and Volumes vs. Individual Data on Demand and Costs

The exchange of information on prices and quantities more directly allows the establishment and monitoring of a collusive agreement on prices and quantities, as opposed to the exchange of information on demand and cost factors for example. Despite that, the sharing of information on demand and cost factors may also lead to enhanced coordination among firms through the facilitation of both the coordination of actions and the monitoring of agreements.

[8] *See* K. Kühn, 2001. "Fighting collusion by regulating communication between firms," *Economic Policy*, 16:32, 167-204.
[9] *See* J. Padilla, 2010. "The Elusive Challenge of Assessing Information Sharing Among Competitors Under the Competition Laws," *Roundtable on Information Exchanges Between Competitors Under Competition Law*, OECD, DAF/COMP 28; *see* also R, Jensen, 2007. "The Digital Provide: Information (Technology), Market Performance, and Welfare in South Indian Fisheries Sector," *The Quarterly Journal of Economics*, 122:3, 879-924; and J. Farrell and N. Gallini, 1998. "Second-Sourcing as a Commitment: Monopoly Incentives to Attract Competition," *Quarterly Journal of Economics*, 122:3, 879-924.
[10] *See* M. Ivaldi, B. Jullien, P. Rey, P. Seabright and J. Tirole, 2003. "The Economics of Tacit Collusion," *Report for DG Competition, European Commission*; *see* also M. Motta, 2004. *Competition Policy: Theory and Practice,* Cambridge University Press.

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Nevertheless, these are still less direct ways of coordinating and may, under particular circumstances, produce meaningful efficiency gains.

Frequency of the Exchanges

All else equal, a higher frequency of information exchanges will increase the likelihood of a collusive agreement, though that frequency does depend on the market. In fairly stable markets characterized by long run contracts, less frequent exchanges of information would be necessary in order to coordinate behavior, while in more unstable markets or those in which price negotiations are more frequent, exchanges of information would have to occur at a higher frequency in order for a collusive outcome to be sustainable.

How the Exchange of Information is Structured and Controlled

A direct exchange of information between two competitors has in principle a higher likelihood of being harmful than if that exchange of information occurs through an intermediary. This factor also relates to the intent of the parties when exchanging such information, i.e., how critical it is that it remains just between the parties or if others, non party to the agreement, are allowed to access the information and play the role of an intermediary.

Adoption of Safeguards by the Parties

Particular exchanges of information between the parties may facilitate the access by other companies to competitively sensitive information which was not the information intended to be exchanged under the agreement. Whether the parties adopted safeguards to prevent or limit the participants' access to each others' competitively sensitive information may be indicative of their concern to avoid access to competitively sensitive information and hence to avoid anticompetitive coordination. For example, in the context of merger discussions when a significant amount of information is usually shared among the merging parties, these should be responsible for establishing safeguards to avoid at all cost that information either related or unrelated to the merger can be used at a later stage by one of the parties to its own benefit at the detriment of the other party and of competition in the relevant market, in case the merger negotiations do not materialize.

7.2.3. RELEVANT MARKETS AFFECTED BY THE COLLABORATION

The relevant markets affected by a collaboration among competitors include all of the markets in which the cooperation between the parties occurs or in which it will operate. Therefore, these may include upstream and downstream markets. When relevant antitrust markets have to be defined in order to proceed with this analysis, the definition will follow the methodology of the Agencies' market definition in their respective antitrust laws.

When the collaboration affects goods markets, the analysis should follow the standard procedure relative to merger analysis in each of the countries. When the collaboration involves intellectual property rights, the Agencies should define technology markets, and if the collaboration involves innovation, the Agencies may separately analyze the effect of the collaboration on innovation, particularly when such effects cannot be adequately addressed either through goods or through technology markets analysis. All analyses should be in accordance with the law and guidelines followed in each of the jurisdictions.

7.2.4. MARKET SHARES AND MARKET CONCENTRATION

Market share and market concentration affect the likelihood that the collaboration will either create or increase market power, or that at the least will facilitate its execution in the relevant market. This market power is defined as the ability, over a significant amount of time, to profitably raise prices above competitive levels or restrict product quantity, quality, variety or innovation below competitive levels.

The newly created or enhanced market power may be due to superior quality, skill, foresight or innovation. But it may also be due to reduced competition between the parties to the collaboration or between any of the direct parties and third parties through foreclosure of competitors.

If the parties' combined market share is low, the agreement is unlikely to give rise to anticompetitive effects, and no further analysis may be required. A low market share means that the parties will need to restrict their output more in order to produce a given price increase than they would if their market share were high. The definition of "low" market share may vary depending on the specifics of the agreement and the parties involved, as well as the market. Given the extensive variety of horizontal collaborations and their potential effects, it is difficult to establish an actual market share threshold below which anticompetitive effects can be presumed away. But as a de minimis rule, Agencies may consider not challenging the collaboration when the combined market share is below 15%. Despite this

recommendation, this value should not be seen as an actual threshold, as investigations may proceed when the combined market share is below that value, or investigations may cease even if the combined market share is above that 15%. In general, the Agencies' approach to calculate market shares is set forth in the respective country's antitrust laws on mergers and acquisitions.

The Agencies should calculate market concentration as set forth in the same laws. Seen individually, a low level of market concentration makes it less likely that a collusive agreement would be enforced, even tacitly. But such evidence would have to be considered in the context of the market at hand, the length and the type of the relationship, among other factors.

The calculation of current market shares and market concentration and their historic evolution is only a starting point in the analysis of potential anticompetitive effects. The Agencies may also consider whether other factors could signal that current market shares and market concentration are likely to understate or overstate the potential competitive impact of the collaboration. Among others, the Agencies may analyze particular future developments and their implications for future market shares and market concentration.

In their assessment of the likelihood of anticompetitive effects of a horizontal collaboration, the Agencies will also analyze the likelihood that unilateral and coordinated effects may arise. With respect to the likelihood of unilateral effects reducing competition, the Agencies are likely to analyze agreements directly limiting independent decision making by the parties, including those which combine the control of key assets (be they productive, financial or other) and interlocking directorates. With respect to the likelihood of coordinated effects reducing competition, the Agencies may analyze factors such as the stability of market shares over time, barriers to entry and the likelihood of entry, and the countervailing power of buyers/suppliers. When analyzing the likelihood that collaborations will facilitate collusion, the Agencies may examine factors such as those in section 7.2.5.

7.2.5. ECONOMIC FACTORS INFLUENCING THE LIKELIHOOD THAT THE AGREEMENT WILL FACILITATE COLLUSION

This section provides general guidance on the characteristics of the relevant market which may make a collusive outcome more likely. These factors are based on the three critical requirements identified by cooperative game theory: consensus, detection and punishment. The first requirement for successful collusion, consensus, is for the parties to come to an agreement on the key parameters of collusion (fix

prices, rig bids, allocate customers). The second requirement is the ability to detect cheating. The third requirement is the ability to punish cheaters.[11]

A variety of market characteristics have been identified as influencing the likelihood that firms will reach consensus, detect and punish cheating. Many of these characteristics are related to simplicity and transparency of the market, as both increase the likelihood of collusion. Simplicity is greater when products are homogeneous, firms compete in fewer markets, there are few and similar firms, customers are alike and market conditions are fairly stable. There is greater transparency when competitors can observe each others' prices, sales, and customers on a fairly contemporaneous basis. These and other factors are described below.

Number of Firms and Market Concentration

Market power vanishes quickly with an increase in the number of competitors in a market while typically the effect of private information disappears more slowly with the increase in the number of competitors. Therefore, as the number of competitors increases, it is more likely that potentially procompetitive effects of an agreement dominate the potential anticompetitive effects of the same agreement. Additionally, it may also be expected that when the number of competitors is high, it will be harder to coordinate behavior in a conspiracy, as well as to detect cheaters and to punish them.

Despite the appeal of this argument, empirical studies have not been able to find a clear relationship between market concentration and the duration of collusion. There could be a variety of reasons for such mixed findings, one being that the known cartels may just be a small sample of the universe of cartels, perhaps biased towards particular industries and locations. Another reason is that researchers do not know about collusion attempts which did not get started because negotiations failed, neither do they know about the successful undetected cartels. It may also be that the mixed findings are related to the effect of collusion on industry concentration itself.[12]

Homogeneity of the Product

[11] The Consensus-Detection-Punishment paradigm. *See* A. Jacquemin and M. Slade, 1989. "Cartels, Collusion and Horizontal Merger," in *Handbook of Industrial Organization*, edited by R. Schmalensee and R. Willig, at 415-417.

[12] *See* M. Levenstein and V. Suslow, 2006. "What Determines Cartel Success," Journal of Economic Literature, 44, 43-95; *see* also R. Abrantes-Metz, J. Connor and A. Metz, 2012. "The Determinants of Cartel Duration," *Working Paper*.

Homogeneity of products sold across different competitors can facilitate consensus, particularly on price. On the other hand, when products are heterogeneous such consensus may be more difficult to reach given differences in quality and competitors' perceptions on how those qualities should be reflected in prices.[13]

Symmetry among Competitors

Similarity or symmetry among competitors may facilitate reaching a consensus and therefore increase the likelihood of collusion. When cost structures are significantly different among competitors, those with lower costs may prefer a lower collusive price with higher sales than those with higher costs, making it harder to reach a consensus. On the other hand, information exchanges between competitors in heterogeneous markets may allow participants to be more easily aware of their differences and potentially enhance a successful collusive outcome.[14] Competitors who sell to different types of consumers and those with very different market shares may also find it more difficult to coordinate behavior as consensus may be harder to reach.

Market Transparency

Collusion is facilitated when there is transparency, as participants need sufficient information to coordinate actions and detect cheating. Visibility of competitive activity and transactions enable collusion. Exchanges of information can increase transparency and limit the competition. An information exchange will be more valuable in increasing transparency when transparency was otherwise low. Therefore, an agreement which significantly increases transparency in an opaque market is more likely to have an anticompetitive behavior than is another, similar agreement reached in an already transparent market. Evidence has shown that participants in successful conspiracies exchange information fairly regularly.[15]

Market Complexity

Successful collusion is less likely to be initiated and sustained in complex markets, as there may be several aspects that the co-conspirators would have to coordinate on. It would also be more difficult to detect cheating in complex markets. That said, an agreement between competitors involving an

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[13] See D. Carlton and J. Perloff, 1994. *Modern Industrial Organization*. Addison Wesley, 4th edition, 131-132.
[14] *See* G. Stigler, 1964. "A Theory of Oligopoly," *Journal of Political Economy*, 72, 44-61.
[15] *Id.* at 69-71.

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information *exchange detailed enough to allow coordination could help overcome the inherent complexity of the market.*

Stability in Demand Conditions

Stability in demand and other market conditions may facilitate consensus and the detection of cheating. For any given cartel member, it may be easier to infer that if its own sales decreased when demand is stable, then it is likely there was cheating by another cartel member. Of course when demand is volatile it is more difficult to draw such a conclusion.

Multimarket Contact

In some cases, the same firms compete with each other across different product or geographic markets. These cases enhance the capability to punish deviations from collusive agreements, as cheating in one market can be punished in another market.[16]

Barriers to Entry

In markets where entry is easy, the potential for incumbents to successfully collude will be limited if the collusive arrangement raises prices or reduces sales. Some empirical studies have found that ease of entry is the leading cause of cartel dissolution.[17]

Low Benefits to Cheating

Unstable cartels are characterized by greater benefits to cheating. Where customers purchase products through long time contracts, the incentive for co-conspirators to cheat is reduced relative to markets in which products are purchased daily. When data are easily available to monitor deviations from collusive arrangements, the incentives to cheat will also be low.

7.2.6. OTHER FACTORS INFLUENCING THE LIKELIHOOD THAT THE AGREEMENT WILL DECREASE THE INCENTIVE AND THE ABILITY TO COMPETE

Often, collaborations do not end competition among the parties. It is possible for competition to continue through independent business operations or through

[16] See B. Douglas and M. Whinston, 1990. "Multi-Market Contact and Collusive Behavior," *Rand Journal of Economics,* 21, 1-26.
[17] *See* Levenstein and Suslow (2006), *supra* note 13, at 75-79.

membership in other collaborations. The control of key variables to competition may remain outside of the collaboration, such as the independent marketing of the product and setting of prices for the collaborations' output.

However, it is also possible that the explicit contractual terms of the collaboration limit or eliminate competition among the parties, or do so indirectly by changing their incentives to compete.

When the nature and intent of the agreement and the market shares, market concentration and the presence of other relevant economic factors indicate the likelihood of anticompetitive effects, it is recommended the analysis of the extent to which the collaboration has the ability and provides the incentive for its participants to compete independently from each other. Among other factors, the Agencies may consider features of the formal agreement such as exclusivity, control over assets, financial interests in the collaboration, the control of the collaboration's key competitive decision making, the likelihood of anticompetitive information sharing and the duration of the collaboration.

Exclusivity

> The Agencies may examine whether the agreement allows the parties to compete with each other and their collaboration, either individually, or through separate businesses or other collaborations. If the agreement is already in cooperation, the Agencies may also analyze whether the parties have continued to compete in other markets in which both operate but which may not be directly affected by the collaboration.

Control over Assets

> The Agencies may analyze the extent to which the parties are required to contribute significant assets to the collaboration. Such contributions may reduce the parties' ability and incentive to compete against each other or against their collaboration in the markets relevant to the agreement or in other markets in which the parties operate.

Financial Interests in the Collaboration

> The Agencies may assess each parties' financial interests in the collaboration and their potential impact on the ability and incentive of the parties to compete against each other and against the collaboration. In general, it is expected that the greater the financial interests of the parties in the collaboration, the lesser the incentive for them to compete against it.

Control of the Collaboration's Key Competitive Decision Making

The Agencies may consider matters of organization and governance related to the collaboration among the parties, in order to assess the extent to which the governance structure of the collaboration allows it to act as an independent decision maker. In general, the incentive to independently compete is reduced when the parties gain control over the collaboration's significant competitive decisions with respect to price and output, among others.

Likelihood of Anticompetitive Information

Depending on several other factors, there may be an opportunity and an incentive to share sensitive information related to the relevant markets for the collaboration, but potentially also to share information related to other markets in which the parties operate. In general, it is less likely that the agreement will facilitate collusion on competitively sensitive variables if the appropriate governance structures are in place to safeguard these occurrences.

Duration

The Agencies may examine the duration of the collaboration and its impact on the incentive to collaborate. As a general rule, the longer the collaboration, the lower the incentive for the parties to compete against each other and the collaboration.

7.2.7 ENTRY

The easier it is to enter the market, the less likely it is that the agreement will give rise to anticompetitive effects. In order for entry to be a sufficient constraint to the parties in the collaboration, it needs to be shown that it is likely, timely and sufficient to deter the potential anticompetitive effects of the agreement. These assessments may generally be made by the Agencies according to their laws and guidelines in each of the respective countries, likely following their frameworks for analyzing mergers and acquisitions.

However, depending on the type, complexity, duration and specific conditions under which the collaboration occurs, less direct analyses may be required to address whether ease of entry could counteract likely anticompetitive effects of the collaboration. For example, a major difference between an analysis of entry during a merger and acquisition and during a collaboration among competitors is that the duration of the former is permanent, while the duration of the latter is typically temporary. Depending on what potential entrants believe will be the duration of the collaboration, they may be more or less likely to take a decision to enter the

market. Other specific factors may also have to be taken into account on a case-by-case basis.

7.2.8 EXCHANGES OF INFORMATION OUTSIDE OF AN EXPLICIT AGREEMENT WHICH FACILITATE TACIT COLLUSION

Exchanges of information may take place outside of a formal agreement among competitors on R&D, production, processing, distribution, marketing or other such common collaborations. There may be associations among competitors in which the exchange of the information is in and of itself the objective of such association. These exchanges will most often be multilateral, but they may also be unilateral.

7.2.8 (a) MULTILATERAL EXCHANGES OF INFORMATION OUTSIDE OF AN EXPLICIT AGREEMENT

For a collusive outcome to emerge it is not strictly necessary that an actual agreement between the parties be formalized. Particular types of information exchanges may facilitate tacit coordination and generate an identical anticompetitive effect as that of a cartel in which an explicit agreement has in fact been formalized.

Assessing the likelihood that exchanges of information (outside an explicit agreement) will lead to anticompetitive effects should follow the same framework as that set forth when there is an agreement, and will therefore also consider all of the factors detailed throughout section 7.

Exchanges of information through trade associations may raise anticompetitive concerns. Trade associations can have a procompetitive or at least a neutral effect on competition and provide valuable benefits such as education, outreach efforts to expand markets, and the enhancement of product compatibility or quality standards. Nevertheless, trade associations can also become forums to share competitively sensitive information and thus facilitate agreements on prices, output, bids or market shares.

Other settings may also provide opportunities for collusion. For example, information exchanges during pre-merger negotiations could raise anticompetitive concerns. In the context of negotiating a merger, some exchanges of information between competitors may be allowed which would under other circumstances not occur. These may be pursued so that the parties can perform their due diligence and develop appropriate transition plans. Some

of these exchanges should be evaluated to decide whether they were necessary in order to implement the legitimate objectives of the merger under negotiation. But if the exchange of information may affect the market place, these exchanges may present potential anticompetitive concerns. The exchange can be especially harmful to competition if the merger negotiations fall apart.[18]

All such exchanges of information outside of the context of a formal agreement between the parties will be subject to the same standards as those collaborations occurring within the context of a formal agreement.

7.2.8 (b) UNILATERAL EXCHANGES OF INFORMATION

Particular types of exchanges of information may be viewed as illegal, even if they are taken unilaterally. In a unilateral exchange of information, a party takes the initiative to disclose information to its competitors, without reciprocity. When the information exchange attempt is pursued unilaterally by one of the rivals, it may still trigger an antitrust investigation.

Guidance on the features of unilateral disclosures of information which may generate the opportunity for an agreement among competitors even in the absence of an explicit agreement on prices, output, market shares or other, is provided below. These are situations in which a firm chooses to unilaterally publicly disclose information which could be seen as an invitation to coordinate behavior with competitors, even if there is no reciprocity. For example, a "public invitation to collude" through the public disclosure of a new pricing strategy which would increase prices, while letting the only competitor know about it and hence facilitating tacit collusion.

Though the specifics of each case will represent key factors in determining whether the disclosure of information is no longer unilateral but is in fact facilitating coordination, in terms of general guidance, the types of behavior described below may constitute an "agreement" in the eyes of the Agencies, though the facts of each individual case will be important to reach a decision.

Private Disclosure

[18] In the case of merger discussions, safeguards should be put in place by each of the parties to ensure that competitively sensitive information is not disclosed to the other party when not absolutely needed for the proposed transaction, and also that any such information when relevant to the proposed transaction is safeguarded if the transaction does not materialize.

Situations in which one of the firms engages in a unilateral exchange of information with a competitor, and that exchange is non-public. Such an exchange is likely to be presumed to constitute an agreement among competitors. That decision will depend on a variety of factors including whether the recipient of the information issued a statement in which it explains that it does not wish to continue to receive such information (whether it occurs by phone, email, instant messaging or any other way), and whether the specifics of the situation are such that an anticompetitive effect is likely to occur.

For example, a unilateral disclosure of information should be presumed to constitute an agreement when it relates to passive participation of cartel members to whom information is provided by one of the cartel members, such as at an industry gathering (passive cartel participants will be those industry participants who know about the existence of the cartel, but who do not directly participate in its active functioning).

Other concerns may nevertheless exist in which a unilateral exchange of information may occur from one company to its competitors but which is less likely to generate behavior coordination. For example, if one of the firms signals a price increase, which may not be followed by competitors and may instead have an opposite effect by inducing competitors to more aggressively compete on price in order to enhance their market shares.

Public Disclosure

A unilateral disclosure of information made publicly may constitute an agreement as it may have the ability to facilitate the reach of a common understanding of how the coordination among competitors should be pursued. This is particularly true if these public statements do not contain valuable information for consumers, but instead may signal future strategies of particular relevance to competitors.

In addition, just as for multilateral exchanges of information, the Agencies may also consider the remaining features of the exchange of information as outlined in section 7.2.2 in order to assess the likelihood that such an exchange of information will cause anticompetitive effects.

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7.2.9 IDENTIFICATION OF PROCOMPETITIVE EFFECTS OF THE COLLABORATION

The exchange of information among competitors has the capability of attaining internal efficiencies which may then be passed to consumers. This is the main benefit of collaborations among competitors. Benefits to consumers from these collaborations may be generated through new products and services developed, cheaper existing products and services, better quality products and services, or allow faster development and market launch of desirable products and services.

Efficiencies can be generated through significant cost savings. For example, joint production or development of a product may be cheaper than if competitors operated individually. Or in markets with asymmetric information about consumers, the exchange of consumer information among competitors may reduce consumer lock-in and therefore strengthen competition. Or yet the public exchange of information about competitors, for example, market shares, may benefit consumers by reducing their search costs and in this way allowing for more efficient consumer choices.

The likelihood that such efficiencies will be realized depends on several characteristics not only of the information exchanged, but also on specific market characteristics such as whether companies compete on quantities or on prices, and what type and level of uncertainties exist in the market.

But even if such efficiencies are generated from competitors' collaborations, it may also be that such collaborations present possible anticompetitive effects. When this is the case, Agencies may consider whether the agreement (either formal or informal) is reasonably necessary to achieve the claimed efficiencies. The efficiencies that the exchange of information claims to achieve cannot be generated neither through anticompetitive reductions in output, nor through feasible and less restrictive means.

Efficiencies need to be passed on to consumers, and in a way in which they outweigh any possible anticompetitive effect that the collaboration may generate. The extent to which this will happen will depend on the features of the collaboration but also on the characteristics of the market and the market power of the parties involved.

7.2.9 (a) EFFICIENCIES GENERATED

In order for the Agencies to assess the likelihood that such efficiencies will be generated and their expected magnitude, these need to be substantiated by the parties. They will need to specify the size of these efficiencies, how and when will they be realized and at what costs; additionally, the parties also have to explain how such efficiencies would enhance their ability and incentive to compete, and why the agreement or exchange of information is reasonably necessary to achieve such efficiencies.

7.2.9 (b) REASONABLE NECESSITY OF THE AGREEMENT

An agreement or exchange of information is "reasonably necessary" to achieve the claimed efficiencies, when such efficiencies would not have been obtained through feasible and less restrictive means.

In order to establish the reasonableness of the agreement, the parties may have to prove that each individual feature of the information exchanged between them is reasonably needed in order to attain the claimed efficiencies. Such features could relate to the particular characteristics of the market, the type of data exchanged, the duration of the collaboration, and other features, including clauses in which the parties' incentives are directly aligned in order to encourage cooperation and to achieve the efficiencies, or to discourage misappropriation of the fruits of the collaboration.

7.2.10 OVERALL COMPETITIVE EFFECT

After the determination that the agreement is reasonably necessary to achieve the efficiencies claimed by the parties, the last step for the Agencies is to determine whether it is reasonable to expect the overall effect of the agreement to be procompetitive. When lacking market evidence, as for agreements not yet undertaken, this assessment involves a judgment over the likelihood of such effect. In cases when the agreement has been in place for a meaningful period of time, the Agencies may estimate the actual effect of the agreement using market outcomes and traditional statistical and econometric tools.

7.2.10 (a) ASSESSMENT ABSENT MARKET EVIDENCE

In order to assess the overall competitive effect absent market evidence of the agreement among competitors, the Agencies may form an opinion on the

likelihood and the magnitude of both the efficiency gains claimed and the possible anticompetitive effects. The overall effect of the agreement is determined by comparing the likelihood and magnitude of the pro- and anticompetitive effects.

7.2.10 (b) ASSESSMENT WHEN MARKET EVIDENCE IS AVAILABLE

Determining whether the information exchanged has had an anticompetitive effect in the market is a critical assessment, in cases in which the exchange of information has been in place for enough time to affect the market. Have prices actually increased, become more stable, or have bids been rigged? Has competition or output decreased? If an effect is found, it may not be necessary to consider all of the features of the information exchanged.

Given that the collaboration among competitors may affect not only the market in which it operates but also other related markets, the Agencies may analyze market outcomes for all of the relevant markets. The Agencies may use economic analysis of market outcomes involving screens for collusive behavior, and employ well established econometric techniques commonly used in other settings to estimate the effect of existing agreements or exchanges of information.[19]

Economic and Econometric Analysis of Market Outcomes

In their analyses of market outcomes, the Agencies may employ empirical tools to estimate the effect on market data from coordinated behavior among firms, either tacit or explicit as a direct result of the formal agreement between the parties or as part of a *per se* illegal hard core cartel. Independently of how the coordinated behavior may have come into play, the methods employed to estimate its results are very close in nature.

These empirical analyses may play an important role and sometimes even role in the final determination of the overall effect of the collaboration among competitors. The reliability of these analyses is importantly dependent on data availability and quality.

Multiple regression analysis is commonly used to build econometric models in order to estimate relationships between the relevant variables such as

[19] A detailed description and applications of these methods in conspiracy cases is provided in American Bar Association Section of Antitrust Law (2010). "Proof of Conspiracy Under Federal Antitrust Laws," Chapter VIII on the Role of the Economic Expert, Sections C through E, 217-238.

price, volume or cost, and using as a benchmark a time period or a comparable industry for which the collaboration is not in place. These relationships are tested for how these may have changed due to the agreement under study, so that its effect can be estimated as the difference between the actual market outcome, and the market outcome that would have occurred in the absence of the collaboration. The need to build this counterfactual requires the use of econometric models.

The inference of whether the observed market effects are due to the collaboration among competitors requires the analyst to attempt to control for other relevant factors which may explain the observed market changes. On the demand side, these factors include changes in consumers' preferences, in income, in availability of related products and their prices. On the supply side, legitimate changes in costs, in the structure of the market as well as in the demand for inputs and changes in technology should also be considered.

The market effect of the collaboration may be translated into several different competitive variables including prices, production and sales, capacity, and the allocation of customers and markets. Though the collaboration may also affect other relevant features of the products and competition such as product quality, variety, innovation, market shares, allocation of customers or markets, and capacity, the study of the effect of the collaboration on prices and output is central: has the collaboration increased prices and/or reduced output.[20]

Econometric Methods Employed

Several of the models employed make use of time-series, cross-sectional, or/and panel data sets containing variables that measure market outcomes such as prices, sales, market shares, costs, bids, and other relevant data.

[20] The type of econometric models used to estimate the effects of the collaboration are similar to those built when screening for conspiracies and manipulations. Examples of applications of these methods can be found at R. Abrantes-Metz and P. Bajari, 2010. "Screens for Conspiracies and their Multiple Applications," *Competition Policy International Journal*, 6:2, 129-144; *see* also J. Harrington, 2008. "Detecting Cartels," in *Handbook of Antitrust Economics*, edited by P. Buccirossi; and *see* also P. Davis and E. Garcés, 2010. *Quantitative Techniques for Competition and Antitrust Analysis*, Princeton University Press. Uses of screens for conspiracies by Competition Authorities include Mexico and Brazil: *see* C. Ragazzo, 2012. "Screens in the Gas Retail Market: The Brazilian Experience," *Competition Policy International Chronicle,* and C. Mena Labarthe, 2012. "Mexican Experience in Screens for Bid-Rigging," *Competition Policy International Chronicle*.

Given data availability, different types of econometric models can be used to rigorously control for the effect of other factors so that the effect of the collaboration can be estimated with high degree of confidence. Regression models will yield an estimate not only of the magnitude of the effect, but also of the likelihood that such an effect is due to the collaboration. For example, the analyst may model the price of the relevant good as a function of drivers such as demand, costs, regulation, entry and exit, and an indicator variable that will take a value of one if the observation occurred during the collaboration, and zero if the observation occurred prior to the collaboration. Using a multiple regression model, the analyst quantifies the effect that each of these variables has on price, which can be used to test whether those effects are statistically significant, i.e., material.

If the effect of the indicator variable for the collaboration is estimated not to be statistically significant after controlling for unrelated competitive effects, then it may be argued that the collaboration is not likely to have had an effect in the market. If an effect is found, then it is likely to have been due to the collaboration. It should nevertheless be understood that *correlation* does not imply *causation*. Econometric methods can be very powerful but they can only show that something is true with a certain degree of certainty, related to the statistical term of a significance level.[21] Therefore, the Agencies may supplement their empirical findings of the likely effect of the collaboration with other supporting evidence in order to determine the overall effect.

8. GENERAL PROCOMPETITIVE AND ANTICOMPETITIVE CONCERNS FOR THE MOST COMMON COLLABORATIONS

Any type of agreement among competitors having as an objective a collusive practice is per se illegal. In this section we focus on agreements which are likely to be procompetitive and hence are analyzed under a rule of reason.

8.1. RESEARCH AND DEVELOPMENT AGREEMENTS

[21] *See* American Bar Association Section of Antitrust Law, 2005, *supra* note 20.

R&D collaborations among competitors may range from collaborations in the development of a new product which directly competes with existing products, to a new product creating a new market, such as the development of a new treatment to cure a particular type of cancer. Many R&D collaborations are somewhere in the middle, as they develop new products which over time replace existing products. Therefore, an analysis of the competitive effects of such agreements will typically require a definition and study of the markets for existing products as well as innovative, new markets.

There are several ways in which an R&D agreement could produce anticompetitive effects through the exercise of market power by any of the parties. First, it may reduce the level or pace of innovation, leading either to fewer and/or lower quality products reaching the market, or to the same products reaching the market but later than would have been the case absent the agreement. Second, such agreements may also reduce the number of competitors in relevant markets through the reduction of competition between the parties outside of the scope of the R&D agreement, or it may facilitate coordination between the parties which could lead to higher prices, lower output or lower quality of the product. It is also possible for the agreement to facilitate exclusionary practices.

The likelihood that R&D agreements will lead to anticompetitive effects depends on the extent to which either the parties have market power in the existing product markets, or that competition in innovation markets may be significantly reduced. Given the existence of market power, a key question is whether the agreement creates the ability and the incentive to reduce R&D efforts pursued either individually or through the agreement, with the effect of slowing the pace of innovation.

R&D agreements may encompass more than simply "pure R&D efforts." Alongside such joint efforts, the parties may also engage in an agreement to jointly produce, distribute, market or license the product. "Pure R&D efforts" related to improvements of existing products or technologies which do not include other joint exploitation agreements are less likely to produce anticompetitive effects than those agreements inclusive of joint exploitation, as they are potentially anticompetitive with respect to innovation if only a few limited number of credible competitive R&D pools are left.

If the R&D agreement of existing products or technologies includes also a licensing agreement to third parties, anticompetitive effects of relative monopolistic practices may be unlikely. But the likelihood of anticompetitive effects increases if the R&D agreement on improvements in existing products or technologies also incorporates joint production, distribution, or marketing agreements, particularly in markets in which the collaborating parties are relevant competitors with significant market shares. In such

cases, increased prices, reduced output and reduced product quality may more easily occur.

When R&D agreements refer to the development of entirely new products or technologies which create their own market, it is unlikely that we will observe price and output effects in existing markets. Therefore, the analysis will focus on potential anticompetitive effects on innovation markets such as slower speed of innovation and lower quality or variety of future products. Anticompetitive effects may be a concern in cases in which the parties have specialized characteristics or assets such as intellectual property, or when regulatory approval processes such as those in pharmaceuticals limit the ability of late entrants to effectively compete with market players already engaged in R&D. In these cases, it may be appropriate to consider the likelihood that a particular R&D effort will be successful and reach the market, such as in the case of pharmaceuticals.[22] Such likelihood of failure or success in making it to the final consumer may, under certain circumstances, be taken into consideration when studying its possible anticompetitive effects. Of course, the higher the likelihood of the product to make it to the market, the furthest along it is in its development process. Hence such anticompetitive effects derived from the R&D agreement will be more likely to occur if the parties initiate their collaboration later in the development stage, i.e., close to the launch of the product or technology.

Though R&D agreements on entirely new products or technologies can produce anticompetitive effects when a very limited number of credible alternative R&D pools are available, they do not commonly raise such concerns. That is also the case even when these agreements are accompanied by joint production, or joint distribution and marketing of the future products. Some concerns may occur if these agreements facilitate the existence exclusionary tactics on relevant technologies, which can be remediated through the granting of licenses to allow third parties to effectively compete.

Most R&D agreements lie between the two types described above and will require an examination of likely competitive effects in both existing and innovation markets. A

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[22] See *D. Dranove and D. Meltzer, 1994. "Do important drugs reach the market sooner?"* RAND Journal of Economics, *25:3, 402-422; J. DiMasi, 2001. "Risks in New Drug Development: Approval Success Rates for Investigational Drugs."* Clinical Pharmacology & Therapeutics, *297-307; and R. Abrantes-Metz, C. Adams and A. Metz, 2006.* "*Pharmaceutical Development Phases: A Duration Analysis*" Journal of Pharmaceutical Finance, Economics & Policy, *14, 19-42.*

typical situation is one in which an R&D agreement for a new technology between two significant players in an existing technology market has the objective of developing a new technology which will eventually replace the existing technology they currently produce. This will be particularly concerning if the two parties have market power in the existing technology market and strong positions in R&D.

The reason why most R&D agreements are procompetitive is because they generate efficiency gains through the combination of complementary skills or assets. This may result in new product developments, improvements in the quality and variety of products, faster development, and enhancement of future innovation through the dissemination of knowledge and larger spillover effects. It should be expected for these efficiency gains to be obtained through the R&D agreement, and not through another less restrictive and practical alternative.

8.2. PRODUCTION AGREEMENTS

Production agreements can take several forms. Through the collaboration, production may be undertaken jointly by all parties or just by a subset. These could be jointly controlled production operations or instead subcontracting agreements.

The analyses of competitive effects focus on the relevant antitrust markets, i.e., markets to which the products are being manufactured under the production agreement. Depending on whether the agreement may have effects in related markets, upstream or downstream, and depending on the parties' positions in those markets, these markets may also be the subject of examination in order to determine the overall competitive effect of the agreement.

Procompetitive effects from production agreements may arise from efficiency gains either due to better technologies or due to the development of higher quality or increased variety of products, or instead due to cost savings including benefits from economies of scale.

Production agreements can also raise anticompetitive concerns, namely when they facilitate coordination between the parties leading to reductions in output, quality or innovation, or when they lead to price increases, capacity restrictions, or adversely affect other relevant features. If the parties to the agreement do not have a significant market share in the market relating to their cooperation (for example, if the combined market share is lower than 15%), then the agreement is less likely to raise anticompetitive concerns as its market impact should be constrained.

Depending on the markets, anticompetitive effects could also occur in a downstream market particularly if at least one of the parties has a significant market share in that market. The collaboration could allow the parties to raise the price of their output which serves as an input to another product manufactured by rivals, and in this way decrease competition in that downstream market.

As explained in these guidelines, price-fixing agreements or those reducing output or limiting market shares are per se illegal (for most of the relevant jurisdictions). However, in the context of a production agreement, the parties may agree to set the output level of their joint production ahead of time, as long as other features of competition are not affected. They may also agree upon the price of their joint production as long as this is a necessary condition for the joint production to occur.

The likelihood of anticompetitive effect depends on the case at hand, the specifics of the agreement and the characteristics of the market. For example, the production agreement is less likely to raise anticompetitive concerns if the joint production allows the creation of a new product which, absent such collaboration, would not have been feasible. In other markets for which manufacturing is the key economic activity, production agreements are likely to raise more anticompetitive concerns.

A production agreement may also increase the likelihood of collusion particularly when it increases the parties' market power to a significant level and if it the exchange of information between the parties involves commercially sensitive information on future output, price or other market strategies.

When the production agreement also contains a distribution or a marketing agreement, other concerns to competition may also arise. These are addressed in section 8.4 below.

8.3. PURCHASING AGREEMENTS

Purchasing agreements among competitors will most commonly lead to the enhancement of buying power of the involved parties leading to lower prices or better quality products. These collaborations can generate significant cost savings through reduced transaction and storage costs, and in this way facilitate economies of scale.

The collaborations may involve not only horizontal but also vertical agreements. Even if the analysis of the horizontal agreement does not raise anticompetitive concerns, it should be followed by an analysis of vertical agreements in accordance with the laws and procedures in each jurisdiction. Both analyses should relate to the two relevant markets (at least) affected by the purchasing agreement: the relevant purchasing

market(s) and the relevant selling market(s), to be defined according to the laws in each jurisdiction.

There are circumstances under which such collaborations among competitors may create or increase market power by the participating buyers to an extent which could lead to anticompetitive effects. In the selling or downstream market, this could lead to pressure to increase price, reduce output, reduce innovation, reduce product variety or quality, or lead to exclusionary practices through the exercise of monopsony power by the parties to the agreement. When the parties to the agreement have monopsony power in the purchasing market, other agreements between the parties and their intensity may also be analyzed by the Agencies. These concerns are reduced when the parties do not have significant market power in the selling market.

As with other types of collaboration among competitors, if it is not truly related to joint purchasing but is instead a vehicle to engage in output reduction or price-fixing for example, then the agreement is illegal. Buying agreements may facilitate collusion through the enhanced ability to coordinate the parties' decisions and behaviors in the selling market. Additionally, competitively sensitive information may be exchanged by the parties in order to facilitate the execution of the joint purchasing agreement, which may lead to easier coordination in the downstream market.

8.4.PROCESSING, DISTRIBUTION AND MARKETING AGREEMENTS

Processing, distribution and marketing agreements may take a variety of forms and combine one or more commercialization functions.

Usually, distribution agreements represent some of the most limited in scope and are typically assessed under antitrust laws related to vertical agreements in each of the jurisdictions, unless the parties are competitors in the relevant market. Distribution agreements may also allow for collusive outcomes through the allocation of customers or markets.

When two or more commercialization functions such as joint production and joint distribution are combined in the collaboration agreement, vertical concerns may also come into consideration.

The markets potentially affected by the collaboration may not be just the market in which the collaboration operates, but also markets neighboring the collaboration which may be horizontally positioned with respect to the operating market but also vertically positioned, either upstream or downstream.

Commercialization agreements may give rise to significant efficiency gains in terms of cost savings, economies of scale and scope, or the reach to the market of products which otherwise may not have occurred; all of these are particularly relevant for smaller producers. They can therefore contribute to enhanced competition.

But commercialization agreements may raise various anticompetitive concerns such as price fixing, output restrictions, market allocation of customers or geographic areas, and the exchange of commercially sensitive information within or outside of the scope of the cooperation which may facilitate a collusive outcome. The likelihood of collusion depends in part on the characteristics in which the collaboration operates and the features of the information exchanged between the parties. These concerns are likely to be validated through anticompetitive effects when the involved parties have a significant level of market power.

9. *DE MINIMIS* RULE

This section contains a recommendation for a *de minimis* rule which Agencies may wish to follow when analyzing agreements amount competitors. As such, the Agencies may consider not to challenge a collaboration among competitors when the collective market share for all parties is no more than 15% in each relevant market potentially affected by the collaboration itself. This *de minimis* rule does not apply to agreements that are *per se* illegal, nor to those that would be challenged without a detailed market analysis or to which a merger analysis is applied.

This *de minimis* rule is designed not only to limit the case load of Agencies to cases which are more likely to have anticompetitive effects, but also to provide additional information to market players on conditions under which the Agencies may not analyze a collaboration among competitors.

Each jurisdiction may wish to set their own *de minimis* rules in which Agencies see anticompetitive behavior as so unlikely that such exchanges of information are presumed to be lawful without further inquiries into particular circumstances. These rules are designed to encourage procompetitive exchanges of information, but they should not discourage collaborations that fall outside of the specified boarders.[23] The design of a set of *de minimis* rules should also take into account that particular collaborations falling within those, for example in R&D, may still facilitate collusive outcomes through the dissemination

[23] See K. Kuhn, 2010. "Designing Competition Policy towards Information Exchanges – Looking Beyond the Possibility Results," Roundtable on Information Exchanges Between Competitors Under Competition Law, OECD, DAF/COMP(2010)27, Section five for a detailed discussion on safe harbors.

of information among the parties affecting the relevant antitrust market for the collaboration or other markets in which the parties participate.[24]

10. EXAMPLES

Example 1: Exchange of Price Data

FACTS

The three leading gasoline and oil companies with a combined 85% market share exchange information on prices for gasoline across their gasoline stations in country *A*'s highways, at the end of each business day. The same pricing data are available on a daily basis to the general public, as it is posted in panels every 50 miles of each highway. The oil companies claim that this exchange of information cannot have anticompetitive effects since it is publicly available.

ANALYSIS

The pricing information exchanged by the oil companies over the phone is not genuinely public. If each of the companies were to gather pricing information related to all of the gasoline stations by competitors, on a daily basis, located in all of the country's highways, it would have to spend a significant amount of time and resources in order to collect all data. The costs associated with this information gathering are potentially high, so that it may be possible that such information could not otherwise be obtained by the firms but-for the exchange of information among competitors. Additionally, the information exchanged is exhaustive, covers the entire relevant market, and operates in an oligopolistic market with a homogeneous product. Furthermore, since it is shared among the firms on a daily basis and in a promptly matter, it allows for easy coordination of prices from one day. Therefore, this exchange of information is likely to facilitate collusion and should be further analyzed by the Agencies.

Example 2: Distribution and Marketing Joint Venture I

FACTS

Imagine two new software companies with independently developed software packages which compete with each other. Both companies are formed by computer specialists, and right now, they both believe that their market penetration will be larger

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[24] Michelle S. Goeree and Eric Helland, 2009. "Do Research Joint Ventures Serve a Collusive Function?" *Robert Day School Working Paper Series,* No. 2009-12.

if they enter into an agreement implementing joint distribution and marketing of the network software programs. With that in mind, these companies form a new joint venture which will be the exclusive distributor and marketer of these products, and it is owned 50-50 by the two software companies. The documents for the joint venture state that the two owner companies will jointly agree on prices of the products sold by the joint venture.

ANALYSIS

Despite any possible procompetitive effects this agreement may have had, the two companies have effectively entered into an agreement "not to compete on price" which almost always tends to raise price or/and reduce output. The agreement to jointly set prices may be challenged as *per se* illegal, unless it is reasonably necessary to achieve the efficiencies generated by the collaboration.

Example 3: Distribution and Marketing Joint Venture II

FACTS

Assume the facts in Example, 2, with the following changes. The agreement not to compete on prices is no longer in place, instead the two companies set their prices separately for all of the products distributed and marketed by the joint venture. They also agree to submit quarterly reports to each other about feedback from clients about their products, relating to desirable and undesirable features of each of the products. The system is put in place so that company specific information is not disclosed to the other.

ANALYSIS

Given that there no longer exists an agreement not to compete on price, this collaboration should no longer be challenged as *per se* illegal. The information to be shared by the parties has a very narrow scope and it is unlikely to raise price, reduce output, or have negative effects on quality, service or innovation. That is particularly true since the two companies have a very small combined share of the market. Therefore, the Agencies see no need to investigate this collaboration further.

Example 4: Exclusive Production, Distribution and Marketing

FACTS

A small research company (*A*) has discovered a new substance that is likely to revolutionize the treatment of a particular disease, and it has patented its discovery.

Company *A* does not have its own marketing organization, therefore it joined a larger pharmaceutical company (*B*), into an R&D agreement. Company *B* is company *A*'s main competitor in the R&D space for the treatment of this disease. Company *B* has an 80% market share in the treatment for this disease, but its patent is expiring in 3 years. Company *B* will not only add know-how for product development, but will also provide future access to the market. Under the agreement, Company *B* will have the license to the exclusive production, distribution and marketing of the final product which is expected to reach the market in 3 to 5 years.

ANALYSIS

It is likely that the new product will belong to a new relevant market. Companies *A* and *B* have complementary skills and resources in the development of the final product, and by joining efforts the probability that the final product will make it to the market may significantly increase. Company *B* does not have expertise in the new substance, so its R&D is not likely to be reduced under the agreement, and will need to have a significant amount of the profitability from market launch in order to have the incentive to invest in that effort. Therefore, this agreement is unlikely to raise anticompetitive concerns.

Example 5: Exclusive Dealing, Bundling and Foreclosure

FACTS

There are four pharmaceutical companies (*A*, *B, C* and *D*) manufacturing and distributing pediatric vaccines. Suppose there are only two relevant markets for pediatric vaccines, market 1 and market 2. Company *A* has a market share of 85% in market 1 and companies *A* and *D* combined have a market share of 90% in market 2. Company *B* only sells vaccines for market 1 while company *C* only sells vaccines for market 2. Companies *A* and *D* have an agreement in market 2 to distribute and market their vaccines jointly. Pediatricians belong to purchasing groups which negotiate prices for these vaccines with each of the four companies. Company *A* has entered into agreements with most of these purchasing groups in which doctors agree to purchase all of their vaccines from *A* exclusively for market 1 and *A* and *D* exclusively for market 2, and in exchange *A* and *D* will offer them discounted prices.

ANALYSIS

Though this type of collaboration between company *A*, *D* and the purchasing groups for doctors may have procompetitive effects if the discounts on prices actually reduce vaccine prices otherwise charged, this agreement can also produce significant anticompetitive concerns. The bundling by company *A* accompanied with a price

discount may effectively foreclose companies *B* and *C* out of this market since each of them only competes in one of the markets and therefore may not individually be able to compete against the bundled price discount offered by company A. It could also be that this agreement may induce companies *B* and *C* to enter into a subsequent agreement among each other to more effectively compete against company *A* and *D* in both markets. Additionally, there is also the possibility that the distribution and marketing agreement between companies *A* and *D* may also effectively be reinforcing foreclosure of companies *C* and *D*, potentially leading to a collusive outcome. Therefore, this agreement should be further analyzed by the Agencies.

Example 6: Multiple Relationships Between Competitors

FACTS

Two suppliers of product X, companies *E* and *F*, form a production joint venture. Together, companies *E* and *F* have a market share of 20%. There are four other companies in this market: companies *A*, *B*, *C*, *D*, and *G*, with 30%, 25%, 15% and 10% market shares respectively. Company *E* already had a joint production plant and distribution agreement with company G.

ANALYSIS

This is a market with a fairly small number of competitors and with symmetric structures, given the production agreements. The new agreement between companies *E* and *F* effectively increased the market concentration and also links company *F* to company *G* through both their agreements with company *E*. Though there is the possibility of significant efficiency gains due to the agreement between *E* and *F*, there is also a concern that restrictions on competition may be larger than the potential procompetitive benefits of the agreement. Therefore, Agencies should further analyze this agreement.

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