CHAPTER 4 - COORDINATED EFFECTS ANALYSIS UNDER INTERNATIONAL MERGER REGIMES[1]

OVERVIEW

A merger, joint venture or other concentration typically removes at least one independent seller from a relevant product and/or geographic market. Depending on the competitive strength of the departing firm, the number and incentives of the remaining firms in the market, and the environment in which those firms compete, a transaction may result in a new dynamic in the market – namely, the incentive for the remaining firms to coordinate their competitive behavior based on rational predictions about the reactions of the remaining rivals, rather than to compete vigorously. Competition law and regulatory agencies should exercise their discretion in such a way as to evaluate the likelihood that transactions will result in anticompetitive coordinated interaction, and act to prevent that result should available factual evidence and economic analysis demonstrate the likelihood it will occur. This paper examines the approach taken by the merger guidelines of twelve jurisdictions with regard to coordinated interaction and evaluates the underlying economic basis for determining when a merger will create such an effect.

I. INTRODUCTION

1. Competition law has long been concerned that the loss of a firm through a merger, joint venture or other concentration may facilitate coordination among the remaining firms in the industry, leading to reduced output, increased prices or diminished innovation. The analytical framework used by competition authorities has recognized this fundamental competitive effect in a variety of forms, treating it in some cases with detailed discussion and analysis and, in others, merely with passing notice. This study evaluates the treatment of coordinated effects in the

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regulatory framework of twelve jurisdictions[2] as expressed in their respective guidelines for analysis of horizontal mergers.[3]

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[2] The jurisdictions evaluated include Australia, Brazil, Canada, the European Commission, Germany, Ireland, Japan, New Zealand, Romania, the United Kingdom and the United States. The authors note that the merger guidelines of Finland were not evaluated due to the lack of an English translation of these guidelines relating to coordinated effects. It should also be noted that, at the time of this paper, the guidelines of the European Commission are still in the drafting stage. They have been subject to a public consultation and may be modified accordingly. Specific references to these guidelines are as follows:

Australian Competition and Consumer Commission, *Merger Guidelines*, *available generally* http://www.accc.gov.au/fs-pubs.htm (June 1999) (referred to herein as "Australian Guidelines").

Brazilian Secretariat for Economic Monitoring, *Guia para Análise Econômica de Atos de Concentração Horizontal*, *available generally* http://www.fazenda.gov.br/seae/ (Non-official English translation provided by Analytical Framework Subgroup, Exhibit, Concentration Act, Economic Analysis Form) (referred to herein as "Brazilian Guidelines").

Canadian Competition Bureau, *Merger Enforcement Guidelines*, http://strategis.ic.gc.ca/pics/ct/meg_full.pdf (Mar. 1991) (referred to herein as "Canadian Guidelines").

European Commission, *Guidelines on the Assessment of Horizontal Mergers Under the Council Regulation on the Control of Concentrations Between Undertakings* [2004] O.J. C31/5 (referred to herein as "EC Guidelines").

Bundeskartellamt, *Principles of Interpretation*, http://www.bundeskartellamt.de/Checkliste-E02.pdf (Oct. 2000) (referred to herein as "German Guidelines").

Ireland Competition Authority, *Notice in Respect of Guidelines for Merger Analysis*, Decision No. N/02/004, http://tca.ie/decisions/notices/n_02_004.pdf (Dec. 16, 2002) (referred to herein as "Irish Guidelines").

Japan Fair Trade Commission, *Guidelines for Interpretation on the Stipulation that "The Effect May Be Substantially to Restrain Competition in a Particular Field of Trade" Concerning M&As*, http://www.jftc.go.jp/e-page/guideli/maGL.pdf (Dec. 21, 1998) (referred to herein as "Japanese Guidelines").

New Zealand Commerce Commission, *Practice Note: 4, The Commission's Approach to Adjudicating on Business Acquisitions Under the Changed Threshold in Section 47 – A Test of Substantially Lessening Competition*, http://www.comcom.govt.nz/publications/getfile.cfm?doc_ID=303&filename=pnote428may01.pdf (referred to herein as "New Zealand Guidelines").

Romanian Competition Council, *Guidelines on Relevant Market Definition With a View to Determining the Significant Market Share*, http://www.globalcompetitionforum.org/regions/europe/Romania/Eguide%7E1.pdf (Mar. 21, 1997) (referred to herein as "Romanian Guidelines").

United Kingdom Office of Fair Trading, *Mergers: substantive assessment, A consultation paper*, http://www.oft.gov.uk/NR/rdonlyres/eecpmdiytaqv7d6xvi3qnz6kkk5rcyb7qodmcrgjhi3ylmsqy6brimbfstmvz5bhdupuqtg4ufprnnkskw2senkqxgf/oft506.pdf (Oct. 2002) (referred to herein as "UK OFT Guidelines").

United Kingdom Competition Commission, *Merger References: Competition Commission Guidelines*, http://www.competition-commission.org.uk/rep_pub/rules_and_guide/pdf/15073compcommguidance2final.pdf (June 2003) (referred to herein as "UK Competition Commission Guidelines").

United States Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, http://www.usdoj.gov/atr/public/guidelines/hmg.htm (revised Apr. 8, 1997) (referred to herein as U.S. Guidelines").

2. The merger guidelines of most jurisdictions recognize expressly that a transaction may alter the competitive dynamic of an industry in such a way as to alter the incentives of the competitors in a market, tipping a previously competitive market towards coordination and creating an adverse impact on competition. Most jurisdictions, however, do not fully examine the underlying economic interplay between firms that leads to a danger of coordinated interaction. Guidelines that explain the economic foundation underlying a merger's potential for illegal coordinated interaction provide useful information, as evident in the German Guidelines:

> Competition within an oligopoly is a "strategic game" of action and reaction. Against this background modern oligopoly theory is strongly based on the industrial economy aspects of game theory . . . Game theory takes account of the fact that other market participants are also active at the same time and thus have an influence on the market process. The same theory therefore assumes that every participant in the market follows his optimum strategy, which is designed in response to the optimum strategy of the other market participants . . . The corresponding interaction may lead on the one hand to intensive competition with low consumer prices and to product and process innovations. On the other hand, it can also result in long-term price rigidity and a transfer of competition to advertising and product differentiation without any technical progress. Oligopolies are therefore not good or bad *per se*. One type is particularly

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[3] It is not the authors' intent to provide a compendium or catalogue of guidelines currently in use. Instead, this work is intended as an inclusive, but not exhaustive, discussion of the precepts and practices used by enforcement agencies in merger analysis applying a coordinated effects theory of anticompetitive harm. For purposes of discussion, examples and specific reference are drawn from the guidelines of various jurisdictions; however, it should not be inferred from a reference to a practice of one jurisdiction that a similar example could not be found in the guidelines of another, or that the use of specific examples implies an endorsement of one jurisdiction's approach over another.

It is important to note that the guidelines issued by the countries subject to this study may not fully describe the exercise of substantive jurisdiction by the countries. This study does not undertake an analysis of actual formal or informal enforcement efforts. Therefore, limitations noted herein should be viewed solely as limitations of the horizontal merger guidelines of a country.

> significant for competition policy and the application of competition law: non-competitive or only partly competitive oligopolies.[4]

3. As the German Guidelines make clear, an oligopolistic market structure is typically a necessary condition for the creation of coordinated interaction, but is insufficient grounds, on its own, for determining that coordinated interaction will exist.

II. SUBSTANTIVE STANDARD OF REVIEW: SLC VS. DOMINANCE

4. The evolution of competition policy has varied among jurisdictions. Two basic models have evolved. Some countries describe their efforts under a standard that seeks to prevent the "substantial lessening of competition" (SLC). Other jurisdictions have approached the issue from the standpoint of preventing the creation or enhancement of dominance.

5. Numerous jurisdictions have imposed a substantive standard of merger analysis that depends upon the creation or enhancement of a dominant position. Most notably, the European Community Merger Regulation (ECMR) had, until recently, relied on a dominance standard as a substantive test for evaluating proposed undertakings and determining whether such undertakings should be challenged, including in those instances where the underlying competitive concern stems from a theory of coordinated interaction theory of harm. From May 1, 2004, the substantive standard in the EC will change to that of "significantly impediment to effective competition", bringing it closer to the SLC test.[5] Where "dominance" is the controlling standard, as it is in Germany, it has been expressly applied to mergers

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[4] German Guidelines, § II.A.1 (footnotes omitted).

[5] Council Regulation (EC) No 139/2004 of January 20, 2004 on the control of concentrations between undertakings O.J. L24/1. The Regulation has already entered into force and will apply from May 1, 2004.

through the concept of "collective dominance."[6] Collective dominance is based on the principle that tacit collusion or co-ordination in oligopolistic markets can lead to the joint exercise of dominance. Jurisdictions utilizing a dominance standard have developed their enforcement authority, in part, through jurisprudential review in this area of merger enforcement. In the EC, for example, there is clear legal authority for challenging such concentrations. For instance, in *Nestlé/Perrier*[7] the theory of collective dominance was explicitly applied by the EC and confirmed by the *Kali und Salz*[8] decision in 1993. The first outright prohibition on the basis of collective dominance occurred in *Gencor/Lonrho*[9] in 1995, followed by *Airtours/First Choice*[10] in 1999. This jurisprudence will continue to apply following the introduction of the new substantive test in the EC on May 1, 2004.

6. Other jurisdictions, such as the United States, Canada, and Australia rely on a "substantial lessening of competition" or "SLC" standard, which utilizes an analytical framework based in procedures for economic analysis of available market data and other relevant evidence in determining the likelihood that any transaction that is likely to result in an unacceptably high risk of an anticompetitive effect is

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[6] Similarly, Romania relies on a dominance test of anticompetitive effects.

[7] *Nestlé/Perrier* (Case No. IV/M.190) [1992] O.J. L356/1.

[8] *Kali und Salz/MdK/Treuhand* (Case No. IV/M.308) [1994] O.J. L186/38.

[9] *Gencor/Lonrho* (Case No. IV/M.619) [1997] O.J.L11/30.

[10] *Airtours/First Choice* (Case No. IV/M.1524) [2000] O.J. L93/1. The Commission's clearance decision was later annulled by the European Court of First Instance on June 6, 2002 (Case T-342/99). The Court held that the Commission had failed to demonstrate the existence of coordinated effects and did not prove that the merger would have adverse effects on competition.

unlawful. Under a SLC procedure-based approach, coordinated effects interaction is more directly recognized as potentially harmful to competition.

7. Substantive differences in the "dominant" and "SLC" standards of review have potential relevance in the analysis of individual cases under various merger regimes, if not in ultimate enforcement authority. For instance, lesser-developed jurisdictions implementing a "dominance" standard may have to develop the scope of authority to prohibit transactions resulting in anticompetitive coordinated interaction (as the more-developed jurisdictions have already done) through judicial review. This may be particularly relevant if the underlying legal authority for such action becomes an issue on appeal.

8. Notwithstanding a potential relevance in specific cases, the divergent standards of review seem not to have a measurable effect on the general exercise of enforcement jurisdiction authority on the basis of coordinated interaction for the jurisdictions whose guidelines were reviewed. More simply stated, every jurisdiction's guidelines recognize, to some extent, that the risk of competitive harm due to coordinated interaction can form the basis for a challenge (or refusal to approve) a transaction. Even so, recent decisions, for example in the EC, suggest that there is still some level of uncertainty with respect to the standard of proof that must be met in such cases, with some suggesting an implication of a movement toward a higher evidentiary threshold and stricter burden of proof.

III. RELATIONSHIP BETWEEN MARKET CONCENTRATION MEASURES AND COORDINATED EFFECTS

9. It is a well-recognized principle that a reduction in the number of firms in a market increases the potential for coordinated conduct, including both overt and tacit collusion. Many countries apply a presumption of illegality when a certain level of market concentration is reached. Conversely, some countries establish a "safe harbour" level of concentration, below which a merger is deemed unlikely to raise serious questions of competitive effect. In this regard, the issue of relevant market definition is central to the evaluation of coordinated interaction. Because a jurisdiction's initial approach to coordinated effects begins with an evaluation of market concentration, the scope of the defined relevant product market is crucial.

10. Three concentration measures typically are utilized as a screening mechanism for analyzing the probability of coordinated interaction: (1) a market share test for the combined entity; (2) an industry concentration ratio ("CR"); and (3) the Herfindahl-Hirschmann Index ("HHI"). It should be noted that the first of these tests, which reviews only the shares of the merging firms and not the shares of other firms in the industry, is unlikely to identify transactions giving rise to concern over coordinated interaction. For example, in a four firm market, a merger between the third- and fourth-largest competitors may only result in a combined market share of 20% (which in most jurisdictions would not be deemed likely to result in single-firm dominance), but might significantly increase the likelihood of tacit collusion.

11. Jurisdictions using an HHI approach include the United States, Ireland and the EC. The U.S. Guidelines deem a merger resulting in an HHI greater than 1800, with an

increase greater than 100, as presumptively resulting in anticompetitive effects.[11] The Irish Guidelines, using the same HHI levels as a trigger, do not establish a presumption of anticompetitive effect, but instead indicate that such transactions are "more usually . . . those that raise competitive concerns."[12] The EC Guidelines state that the EC is unlikely to investigate a concentration that leads to a post-merger HHI of less than 1000.[13]

12. Other jurisdictions rely on an industry concentration ratio or "CR" as a preliminary indicator of the likelihood of coordinated effects. Brazil deems a transaction as *likely* to raise concern if the four leading firms (i.e., CR4) accounts for at least 75% of the total market share and the merged firms' share would be greater than 10%.[14] In Germany, an oligopoly is *presumed* to be dominant if the CR3 is greater than 50% and the CR5 is greater than two thirds (66.7%).

13. Japan does not impose a presumption of illegality, but notes that if the number of competitors decreases and the market becomes an oligopolistic market--for example if the CR3 exceeds 70%--the tendency toward cooperative conduct between

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[11] U.S. Guidelines, § 1.51(c). The U.S. guidelines emphasize the importance of several additional factors in determining a transaction's likely competitive effect and caution against relying solely on concentration levels, such as those provided by the HHI.

[12] Irish Guidelines, ¶ 3.10.

[13] EC Guidelines, ¶ 19. The EC Guidelines also state that a merger leading to a post-merger HHI of 2000 or more and a delta below 150 is likely to raise competition concerns except, for instance, when one or more of the following factors are present: "(a) a merger involves a potential entrant or a recent entrant with a small market share; (b) one or more merging parties are important innovators in ways not reflected in market shares; (c) there are significant cross-shareholdings among the market participants; (d) one of the merging firms is a maverick firm with a high likelihood of disrupting coordinated conduct; (e) indications of past or ongoing coordination, or facilitating practices, are present; and (f) one of the merging parties has a pre-merger market share of 50 % of more." *See* EC Guidelines, ¶ 20. In commentary, the EC has indicated that this higher threshold applies only to non-collusive oliogopolies.

[14] Brazilian Guidelines, ¶ 48.

competitors will be considered.[15] Similarly, Australia will be more likely to investigate a merger where the CR4 is greater than 75% and the share of the merged firm is greater than 15%.[16]

14. New Zealand creates a safe harbour where the CR3 does not exceed 70%, or, if above 70%, the share of the combined entity is less than 20%.[17] Similarly, Canada imposes a safe harbour where the CR4 is less than 65% and the share of the merged firm is less than 10%.[18] In all of these cases, the merged firms' share of the relevant market also must be of sufficient dimension (typically 10-15%) in order for a concern to be raised.

15. The only country employing a pure market share test is Romania, which concludes that an affected market may be created where the combined share of the parties, post-concentration, exceeds 15%.[19] Romania's law with respect to coordinated interaction, however, is not as well-developed as that of many other jurisdictions.

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[15] Japanese Guidelines, § 3(B)(2)(a).

[16] Australian Guidelines, ¶ 5.95.

[17] The New Zealand Guidelines compare their safe harbour to the CR levels used by Australia and intentionally choose a higher level in recognition of New Zealand's smaller economy and generally more concentrated markets. *See* New Zealand Guidelines, § 4.4.

[18] Canadian Guidelines, § 4.2.1.

[19] Romanian Guidelines, § 3.

16. The UK Office of Fair Trading uses a hybrid approach, considering all three measures in its assessment of a proposed concentration, but does not impose any presumption of illegality or grant any safe harbour based on these levels.[20]

IV. ELEMENTS OF COORDINATED INTERACTION

17. Successful coordinated interaction is dependent upon a number of complex market variables that, in any given case, may point in opposite directions. Thus, jurisdictions generally have identified the market factors that weigh on the analysis of coordinated interaction and describe the circumstances in which these factors are likely to favor coordination. Ultimately, the balancing of these factors falls within the prosecutorial discretion of the individual agency.

18. There is general agreement that the presence of three conditions are most relevant to the analysis of coordinated effects: 1) whether the coordinating parties are able to establish terms of coordination; 2) whether the participating parties are able to monitor each other's adherence to the terms of coordination and to detect deviations from the established terms; and 3) whether effective deterrence mechanisms exist to discourage and effectively discipline deviation from the terms of agreement by coordinating parties. Each of these conditions, and the market conditions that indicate their presence, is discussed below.

A. Terms Conducive to Coordination

[20] UK OFT Guidelines, ¶ 4.3 – 4.4.

19. The guidelines uniformly recognize the role that stable markets play in coordinated interaction among rivals. This concept is described in the EC Guidelines: "the less complex and the more stable the economic environment, the easier it is for the firms to reach a common understanding on the terms of coordination."[21] The risks of coordination are highest when the conditions for reaching terms of coordination are favorable and when participants have little incentive for departing from the terms that are established.[22]

20. Reaching terms of coordination requires that a firm have sufficient knowledge and certainty about the likely reactions of competitors. At the same time, competitors need not perfect the terms of coordination in order to harm competition. The ability to establish even the basic parameters of collusion may be a sufficient foundation for coordinated interaction, even in a complex market. This is explained in the U.S. Guidelines as follows:

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

[21] EC Guidelines, ¶ 45.

[22] Brazilian Guidelines, ¶ 79.

coordination to decrease and, depending on their extent, may make coordinated interaction unlikely in the first instance.[23]

21. This explains the ability of coordinating firms to find ways of overcoming problems stemming from complex economic environments.[24] At the same time, it should be recognized that as the complexity of the marketplace dynamic increases, the ability to establish functional terms of coordination decreases, especially when such terms must be established by tacit agreement.

22. Jurisdictions generally recognize that certain conditions will increase the likelihood of coordinated interaction. A number of these factors are accepted universally as increasing the likelihood of coordination.

1. Highly Concentrated Market

23. Coordination is simplified when the number of market participants is small and the likely responses of competitors are easier to forecast. As stated in the Canadian Guidelines, "other things being equal, the likelihood that a number of firms may be able to bring about a price increase through interdependent behavior increases as the level of concentration in a market rises and as the number of firms declines."[25]

2. Homogeneity of Products

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[23] U.S. Guidelines, § 2.11. *See also* EC Guidelines, ¶ 47. ("Co-ordinating firms may, however, find other ways to overcome problems stemming from complex economic environments short of market division. They may, for instance, establish simple pricing rules that reduce the complexity of co-ordinating on a large number of prices.")

[24] *See* EC Guidelines, ¶ 47.

[25] Canadian Guidelines, § 4.2.1.

24. Coordination is simplified when the level of product differentiation is minimal. Markets characterized by relatively undifferentiated products typically involve fewer terms of sale, making it easier for competitors to predict the likely responses of their rivals.

3. Homogeneity of Firms

25. Firms with similar capacity, similar cost structure, common aspects of vertical integration, similar market share, or some combination of these factors are more likely to coordinate. Symmetry among firms increases the probability that the firms will have compatible incentives in response to a particular set of competitive circumstances.[26]

4. Stable Demand

26. Stability of market demand is likely to result in predictable patterns of behavior by market participants, increasing the ability to coordinate.[27] Moreover, stable market demand may promote the entrenchment of sales positions, leading to tacit allocation of customers among sellers.

5. Additional Indicia of Likely Coordination

27. A number of jurisdictions, most notably Australia, Brazil, the EC, New Zealand and the U.S., highlight additional factors as increasing the probability of coordinated

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[26] *See*, *e.g.*, EC Guidelines, ¶ 48.

[27] Australian Guidelines, ¶ 5.168.

interaction. These factors may also speak to other aspects of coordinated interaction, such as the ability to detect or punish deviation.

a) Absence of Potential Entrants or Fringe Competitors

28. The absence of potential entrants or fringe competitors increases the likelihood that coordinated conduct will not be challenged, especially if such firms are present but unable to expand capacity readily.[28] This concept often is captured by the guidelines in an analysis of entry conditions or potential competition generally.

b) History of Coordination

29. A history of past price-fixing or other forms of express collusion in an industry are often indicative of whether or not conditions are favorable to coordination.[29] It should be noted, however, that express collusion is possible in markets that are not well-adapted to tacit coordination. This is particularly true in markets where the terms of sale are complex.

c) Presence of Standardized Pricing or Product Variables

30. Coordinated interaction is facilitated by the establishment by firms of standardized pricing and product variables, such as pricing rules that would reduce the complexity of coordinating on a large number of prices. Examples of these rules, as noted in the EC Guidelines, are establishing a small number of pricing points, thus reducing the co-ordination problem, and having a fixed relationship between certain

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[28] *Id. See also* New Zealand Guidelines, § 6.2 (footnotes omitted).

[29] *See* New Zealand Guidelines, § 6.2 (footnotes omitted).

base prices and a number of other prices, such that prices basically move in parallel.[30]

d) Transparency of Prices or Other Terms of Sale

31. Transparency of prices and structural links make it easier for agreements to be monitored and incentives to be aligned.[31] Indeed, transparent pricing or terms of sale not only indicate a higher likelihood that coordination will occur; it also enables coordinating firms to monitor their rivals' adherence to the terms of coordination.[32]

e) History of Government Price Controls

32. At least one jurisdiction has noted that there is an increased likelihood of coordinated interaction when companies were involved in or were subject to price controls due to its own government's policies.[33]

f) Presence of Industry Trade Associations

33. Industry trade associations may increase the probability of coordinated interaction as they may act as fora through which information on prices and outputs between market participants may flow. These associations may also work as facilitators of

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[30] EC Guidelines, ¶ 47. *See also* U.S. Guidelines, § 2.11.

[31] *See* Australian Guidelines, ¶ 5.168; and EC Guidelines, ¶ 47 – 48.

[32] U.S. Guidelines, § 2.1.

[33] *See* Brazilian Guidelines, ¶ 78.

express collusive agreements.[34] It should be noted that such associations can often serve pro-competitive purposes.

34. Most guidelines are clear that the formation of coordinated interaction does not require overt or express agreement. Thus, a merger or other concentration may result in a violation of the competition laws of the jurisdiction without a *per se* horizontal agreement that would otherwise violate a jurisdiction's antitrust laws.[35]

B. Detection of Deviation

35. Effective tacit collusion requires that the participants be able to effectively monitor each other's adherence to the terms of coordination and detect any deviation. Firms engaged in tacit collusion are continually choosing between maintaining the terms of collusion by keeping prices high and limiting their opportunities with certain buyers, or deviating from the terms of collusion by lowering prices or increasing capacity in order to increase their sales. Firms will find it more profitable to engage in coordination where the likelihood of adherence by their rivals is high. Thus, market conditions that make it easier for competitors to monitor each other's behavior will both facilitate the formation of coordinated interaction and support its execution.

36. By contrast, where detection of a competitor's deviation from the terms of collusion is likely to be slow or uncertain, the incentives to coordinate are diminished because

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[34] *See* Australian Guidelines, ¶ 5.168; and New Zealand Guidelines, § 6.2 (footnotes omitted).

[35] *See*, *e.g.*, Australian Guidelines, ¶ 5.167. ("While the exercise of unilateral market power does not require accommodating action by remaining firms in a market, the exercise of coordinated market power does. This does not necessarily involve collusion of the kind covered by s. 45 but may simply involve signalling or conscious parallelism.")

each participant has less certainty about its competitors' adherence to the scheme and the expected returns from adherence to the scheme are therefore reduced. In other words, the odds that a firm will "cheat" are lower if it would be caught doing so.

37. There are a number of market factors that address the ability to monitor and detect deviations from a collusive scheme.

1. Availability of Market Information

38. The ability to monitor market prices or output, for example in markets that utilize a public exchange, where offers and demands are matched, or in which pricing or output information is readily available, provides an ability to monitor adherence to a collusive scheme.[36] As the UK Competition Commission has noted, however, "even where prices are not transparent, as is often the case in intermediate markets, any deviation from the prevailing behavior by a competitor may nonetheless be readily apparent, because the essence of interdependence is that price cuts by one firm will have a significant impact on others' volumes."[37]

39. At the same time, where market transparency is inhibited, the ability to detect deviations from the collusive scheme may be limited. This may occur when prices between the buyer and seller are privately negotiated or where observable prices do not reflect meaningful discounts, allowances or other incentives.

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[36] *See* EC Guidelines, ¶ 50.

[37] UK Competition Commission Guidelines, ¶ 3.37.

2. Presence of Demand Fluctuations

40. Unpredictable changes in demand or price can undermine the ability to monitor and detect deviations from a coordinated scheme. As the EC Guidelines explain, "[c]oordinating firms should be able to interpret with some certainty whether unexpected behavior is the result of deviation from the terms of coordination. For instance, in unstable environments it may be difficult for a firm to know whether its lost sales are due to an overall low level of demand or due to a competitor offering particularly low prices. Similarly, when overall demand or cost conditions fluctuate, it may be difficult to interpret whether a competitor is lowering its price because it expects the coordinated prices to fall or because it is deviating."[38] In essence, inelastic demand increases a firm's expected return on its decision to coordinate rather than compete.[39] Most jurisdictions do not acknowledge this aspect of detection, which is undoubtedly important to the analysis of coordinated interaction.

3. Presence of Downstream Affiliate

41. Vertical relationships may enable price signaling or price monitoring upstream or downstream of the level of competition affected by the merger, thereby increasing the likelihood of coordination. For example, where firms X and Y compete in the production of product P, the acquisition by X of Y's distribution facilities (but not Y's production facilities) may increase the ability of X to monitor Y's output and pricing of P, even if the merger did not appreciably increase the level of

[38] EC Guidelines, ¶ 50.

[39] Australian Guidelines, ¶ 5.168.

concentration in the distribution of P. Although this situation would not always, and perhaps would rarely, give rise to an anticompetitive effect – *i.e.*, facilitating coordinated interaction that would not otherwise occur – it should be considered by enforcement authorities in merger analysis.[40]

C. Effective Deterrent or Punishment

42. Firms engaged in tacit collusion may have the incentive to deviate from the terms of coordination, even if such deviation would be quickly detected, if there is no effective mechanism by which they would be punished by their rivals. Thus, it is the threat of future retaliation that keeps the coordination intact by increasing the cost of deviation and, thereby, the net benefit of coordination.

1. Credibility of Threatened Retaliation

43. In order for deterrence to be effective, the threat of retaliation must be credible and enacted in a timely manner. Retaliation that is quickly implemented has the effect of reinforcing competitors' resolve to punish deviation and, in some cases, may limit the gain that would otherwise be realized from the deviation.[41]

44. Punishment that could only occur after the passage of significant time or which is not likely to be imposed decreases the level of deterrence and increases the likelihood that parties will engage in competition rather than coordination.

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[40] *See* Australian Guidelines, ¶ 5.159; Brazilian Guidelines, ¶ 80; EC Guidelines, ¶ 51; Irish Guidelines, ¶ 6.6; New Zealand Guidelines, § 9.2; and UK OFT Guidelines, § 5.4.

[41] *See* EC Guidelines, ¶ 52.

45. Moreover, competition agencies should recognize that it may be difficult to accurately discern between a competitive market and a market characterized by a frequent pattern of deviation and punishment. Guidelines should recognize that such a pattern may suggest either that the benefits of collusion (versus competition) are small or that deterrence mechanisms are weak.

2. Nature and Distribution of Excess Capacity

46. The ability to retaliate may require that non-deviating parties have sufficient excess capacity, either individually or collectively, to discipline the deviating party. Guidelines recognize that excess capacity is a factor to be considered in analyzing the likelihood of coordination and retaliation.[42]

V. CONSIDERATION OF ADDITIONAL FACTORS

A. Acquisition of a "Maverick" firm

47. Most guidelines recognize that the presence of a "maverick" firm can effectively prevent coordinated interaction, even where the conditions for establishing coordinated interaction are present.[43] A maverick firm is one that has a greater economic incentive to deviate than do most of its rivals and constitutes an unusually disruptive force in the market place.[44]

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[42] EC Guidelines, ¶ 54; New Zealand Guidelines, § 6.2; and UK Competition Commission Guidelines, ¶ 3.41.

[43] Irish Guidelines, § 4.24; UK OFT Guidelines, § 4.17; and U.S. Guidelines, § 2.12.

[44] U.S. Guidelines, § 2.12

48. In some cases, an acquisition of a maverick firm may enhance the probability that coordination will occur post-merger.[45] A maverick firm may be able to disrupt coordination among other competitors even if the maverick has a relatively small presence in the market. Thus, the acquisition of a true maverick may substantially increase the likelihood of coordination even where the increase in concentration in the market is modest.[46]

49. The effectiveness of the maverick firm is likely to be high where the maverick has the ability to absorb a significant share of business. Thus, a merger may be less likely to result in coordination where the industry maverick is not a party to the transaction and where the economic incentives of the maverick would be undisturbed by the transaction. The guidelines generally do not explicitly recognize this consequence of a maverick's presence in a market.

B. Coordination in Bidding Markets

50. Where the market for a good is characterized by customer tenders and supplies bids, coordination may occur through a tacit understanding about which party will be permitted to win each tender. The removal of a competitor, through a concentration, that otherwise would be expected to prevent the coordination of bids may cause competitive harm.[47]

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[45] Irish Guidelines, ¶ 4.24.

[46] See, e.g., Jonathan B. Baker, Mavericks, Mergers and Exclusion: Proving Coordinated Competitive Effects Under the Antitrust Laws, 77 N.Y.U. L. REV. 135, 177-179 (2002).

[47] EC Guidelines, ¶ 40.

51. The mechanism by which coordination is likely to occur in bid markets is not well established in the guidelines. Generally, agencies should be concerned that the remaining bidders will become entrenched in existing customer relationships, tacitly agreeing not to "raid" each other's customers for fear of being similarly raided by their rivals. This risk of entrenchment likely would be higher where customers' switching costs are high.

52. The increased likelihood that coordination of bids will occur, and the resulting risk of tacit collusion, should not be confused with the unilateral effects concern that may also arise in bid markets. In the instance of unilateral effects, the concern arises when the two best-situated bidders are merging regardless of the total number of bidders in the market. In the coordinated effects case, the concern arises because of the elimination of one of a few bidders that is likely to facilitate a scheme of coordination among remaining bidders.

C. Ability to Sustain Collusion

53. The UK OFT Guidelines state that a condition of successful tacit coordination is the ability to sustain the coordinated behavior in the face of other competitive constraints in the market.[48] This is a useful recognition that issues such as entry, reaction by fringe competitors, efficiencies, import restrictions and failing firm issues should be fully considered, even if the conditions of coordinated interaction are met. It is critical that the possibility of coordinated interaction be considered in

[48] UK OFT Guidelines, ¶ 4.12.

the context of the dynamics of the industry and take account of future conditions that may undermine or facilitate the possibility of collusion.

D. Factors with Ambiguous Effect

54. Many of the guidelines describe the factors to be considered in evaluating the likelihood of coordination, the rationale behind the analysis of the factors, or both. In a few instances, however, guidelines identify factors that are of ambiguous significance in the analysis of coordinated interaction. We have identified some of these factors below.

55. The German Guidelines state that of all the factors that may enter into an analysis of coordinated interaction, special attention should be paid to market share, barriers to entry/potential competition, and assessment of financial resources.[49] This latter point is suspect in the analysis of coordinated effects. Agencies have clearly disagreed on the propriety of considering a firm's financial resources in merger analysis. (*Compare, e.g.*, the U.S. and EC results in *GE/Honeywell*.[50]) To the extent that the analysis is at all relevant, however, it appears to relate to the unilateral ability of a firm to utilize its financial resources to secure or advance a dominant position. In the context of coordinated interaction, experience has demonstrated that a firm's financial condition is not a meaningful indicator of its incentive to collude. Cost structure, excess capacity and other economic factors

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[49] German Guidelines, § II.B.3.

[50] See Press Release, U.S. Department of Justice, Antitrust Division, "Justice Department Requires Divestitures in Merger Between General Electric and Honeywell" (May 2, 2001), http://www.usdoj.gov/atr/public/press_releases/2001/8140.htm; and *General Electric/Honeywell*, Case No. COMP/M.2220, Commission Decision C(2001)1746 (July 3, 2001), *available at*: http://www.europa.eu.int/comm/competition/mergers/cases/decisions/m2220_en.pdf.

are undoubtedly important, but "superior resources" would not appear relevant.[51] Indeed, coordination may often occur between firms with a strong financial position and those with a weak position.

56. The EC Guidelines note that "[r]etaliation need not necessarily take place in the same market as the deviation."[52] This principle, however, should more fully recognize the difficulty in discerning between retaliation and competition. For instance, retaliation in the same market as the alleged deviation can undoubtedly chill competition. However, to the extent that retaliation may occur by way of alleged price undercutting in order to "send a message" to the deviating firm, such action has at least a short-term competitive benefit. Thus, authorities should be cautious in deeming such action as retaliation unless it creates a direct response by the company that "cheated" on the tacit agreement. Moreover, the "message" (if indeed it is tacit) is less likely to be received as retaliatory as the parties move away from the market subject to collusion. Accordingly, an assumption that action in an unrelated market constitutes retaliation could chill competition by firms in other markets. In this regard, retaliation that is executed through vertical relationships or in closely related markets should perhaps be considered as evidence of tacit collusion only in light of an actual disciplining response by the "cheating" party or in light of evidence of intent by the retaliating party.

VI. CONCLUSION

[51] German Guidelines, § I.B.2.

[52] EC Guidelines, ¶ 55.

57. There is a large degree of consensus regarding the factors that are likely to lead to coordinated interaction as the result of a concentration in a market. Some jurisdictions, such as Canada, Germany, the EC and the U.S., have issued guidelines that provide valuable insight into the analytical framework for evaluating the possibility of coordinated interaction. Other jurisdictions have guidelines that are less developed, but are nonetheless consistent in their framework with the more expansive guidelines.

58. We believe there is tremendous value in the development of explicit, well considered guidelines describing both the theoretical basis and the analytical methodology for evaluating the potential for coordinated interaction. A detailed discussion in the guidelines of all countries will serve to reduce the uncertainty of merger approval, reducing the number of potentially anticompetitive transactions attempted and increasing the number of beneficial transactions that may be inhibited by uncertainty.