POLICY ROUNDTABLES

Oligopoly

1999

Introduction

The OECD Competition Committee debated oligopolies in 1999. This document includes an executive summary, an analytical note by Mr. Gary Hewitt for the OECD and submissions from Australia, Canada, the European Commission, Finland, Germany, Italy, Japan, Korea, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States, as well as an aide-memoire of the discussion.

Overview

Oligopolies are markets where profit maximising competitors set their strategies by paying close attention to how their rivals are likely to react. In these conditions, firms might differentiate their products, which can benefit some consumers, but at a price. Oligopoly inter-dependence can also foster anti-competitive co-ordination.

Competition laws prohibit collusion that raises prices, restricts output or divides markets. But the laws do not prohibit conscious parallelism. Thus firms in an oligopoly might imitate their rivals' pricing and other competitive behaviour in a process that harms consumer welfare, yet without reaching an explicit agreement. Competition agencies generally prefer to deal with this risk through structural prevention, notably merger control, rather than detailed regulation. Some competition agencies also employ behavioural restraints to reduce the probability of conscious parallelism.

Related Topics

Fighting Hard Core Cartels: Harm, Effective Sanctions and Leniency Programmes (2002)
Nature and Impact of Hard Core Cartels and Sanctions against Cartels under National Competition Laws (2002)
OECD Recommendation of the Council Concerning Effective Action Against Hard Core Cartels (1998)
Competition Policy and Procurement Markets (1998)
Regulatory Reform, Privatisation and Competition Policy (1992)

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OLIGOPOLY

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FOREWORD

This document comprises proceedings in the original languages of a Roundtable on Oligopoly which was held by the Committee on Competition Law and Policy in May 1999.

It is published under the responsibility of the Secretary General of the OECD to bring information on this topic to the attention of a wider audience.

This compilation is one of several published in a series entitled "Competition Policy Roundtables".

PRÉFACE

Ce document rassemble la documentation dans la langue d'origine dans laquelle elle a été soumise, relative à une table ronde sur les oligopoles qui s'est tenue en mai 1999 dans le cadre de la réunion du Comité du droit et de la politique de la concurrence.

Il est publié sous la responsabilité du Secrétaire général de l'OCDE afin de porter à la connaissance d'un large public, les éléments d'information qui ont été réunis à cette occasion.

Cette compilation fait partie de la série intitulée "Les tables rondes sur la politique de la concurrence".

OTHER TITLES

SERIES ROUNDTABLES ON COMPETITION POLICY

1.	Competition Policy and Environment (Roundtable in May 1995, published in 1996)	OCDE/GD(96)22
2.	Failing Firm Defence (Roundtable in May 1995, published in 1996)	OCDE/GD(96)23
3.	Competition Policy and Film Distribution (Roundtable in November 1995, published in 1996)	OCDE/GD(96)60
4.	Competition Policy and Efficiency Claims in Horizontal Agreements (Roundtable in November 1995, published in 1996)	OCDE/GD(96)65
5.	The Essential Facilities Concept (Roundtable in February 1996, published in 1996)	OCDE/GD(96)113
6.	Competition in Telecommunications (Roundtable in November 1995, published in 1996)	OCDE/GD(96)114
7.	The Reform of International Satellite Organisations (Roundtable in November 1995, published in 1996)	OCDE/GD(96)123
8.	Abuse of Dominance and Monopolisation (Roundtable in February 1996, published in 1996)	OCDE/GD(96)131
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11.	Competition Issues related to Sports (Roundtable in October 1996, published in 1997)	OCDE/GD(97)128
12.	Application of Competition Policy to the Electricity Sector (Roundtable in October 1996, published in 1997)	OCDE/GD(97)132
13.	Judicial Enforcement of Competition Law (Roundtable in October 1996, published in 1997)	OCDE/GD(97)200
14.	Resale Price Maintenance (Roundtable in February 1997, published in 1997)	OCDE/GD(97)229

15.	Railways: Structure, Regulation and Competition Policy (Roundtable in October 1997, published in 1998)	DAFFE/CLP(98)1
16.	Competition Policy and International Airport Services	DAFFE/CLP(98)3
17.	Enhancing the Role of Competition in the Regulation of Banks	DAFFE/CLP(98)16
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22.	Relationship between Regulators and Competition Authorities	DAFFE/CLP(99)8
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EXECUTIVE SUMMARY

by the Secretariat

Considering the discussion at the roundtable, the delegate submissions, and the background paper, the following key points emerge:

- *Mutually aware that their actions will produce reactions from rivals, oligopolists have a strong incentive to substitute anti-competitive co-operation for vigorous competition. Such behaviour, referred to in what follows as "co-ordinated interaction", has negative welfare effects. This is especially clear in the case of collusion.*

The welfare losses associated with co-ordinated interaction are qualitatively the same as those linked to monopoly, i.e. higher prices, X-inefficiency, slower innovation, and reduced product variety. Good examples of co-ordinated interaction other than collusion are price leadership, delivered pricing, and price stickiness around certain focal points.

- *There is a considerable gap between the desire to engage in co-ordinated interaction and the ability to do so successfully. It can be difficult to reach mutually acceptable terms of co-operation, and to ensure that firms do not deviate from them.*

Potentially co-operating oligopolists could have dissimilar costs and face different demand conditions as well. While such differences may not pose a major problem for anti-competitive co-ordination of non-price rivalry, they could make it difficult for firms to settle on mutually beneficial price levels and price gaps among the various goods on offer. Even where these issues are resolved, successful co-operation regarding prices is not assured. Once price has been raised significantly above marginal cost, each oligopolist will have an incentive to shade its prices especially if it believes this will escape detection and retaliation. Durable co-operation often requires that oligopolists work out ways to increase the probability of detection and the certainty of punishment for cheating, all the while avoiding prosecution for anti-competitive behaviour.

[Despite the evident difficulties, large scale and long running cartels are known to exist as evidenced by the increasing number of such cartels currently being prosecuted in a number of OECD Members.]

Behavioural Remedies

- *The principal behavioural remedy for co-ordinated interaction is prohibition of collusion backed up by heavy fines and, in some countries, imprisonment. Because of the heavy sanctions, colluders generally avoid creating direct evidence of anti-competitive communications. This makes it difficult to detect and prove collusion, and explains why competition agencies are often forced to rely on circumstantial evidence. However, evidence of parallel conduct is not and should not be considered sufficient proof of collusion.*

The most common circumstantial evidence consists of closely parallel behaviour. The legal and economic problem with such evidence is that parallel behaviour could have causes other than collusion. In oligopoly settings, parallel price movements for example could arise simply through independent rational behaviour. To convince courts that parallel behaviour has arisen through some kind of agreement rather than merely resulting from oligopolistic interdependence, competition authorities must usually demonstrate that something more has occurred, i.e. establish the existence of one or more "plus factors". These are basically forms of conduct that would not be economically rational absent some agreement among competitors. Courts have also been willing to consider evidence that a particular market structure facilitates collusion. This may be changing, however, since it is increasingly recognised that a market structure conducive to collusion would also facilitate forms of co-operation falling short of such behaviour. Some courts are inclined to presume that firms would not take the legal risks of colluding if they could readily achieve the same result in a more flexible, less risky manner.

Some OECD countries have reacted to the problems associated with proving collusion by widening the net to prohibit "concerted practices", and in a few countries, "facilitating practices" (see below) as well. One country's competition act goes even further by providing presumptions that certain acts constitute evidence of collusion even if there has been no explicit agreement.

Attempts to widen what is caught by prohibitions of anti-competitive horizontal agreements and to lower burdens of proof could result in countries effectively outlawing the kind of parallel behaviour that oligopolistic interdependence strongly fosters. But parallel behaviour induced by interdependence cannot be eradicated with behavioural measures short of ongoing regulation of competitive conduct, a cure that is worse than the disease.

- *In order to increase the chances for successful collusion, and in particular to improve abilities to detect and punish cheating, co-operating firms may employ what are known as "facilitating practices". Some countries prohibit such practices either as abuses of dominance or as themselves constituting anti-competitive agreements. In others, they are counted along with other "plus factors" as circumstantial evidence of an agreement.*

Just about any behaviour making it easier for oligopolists to co-operate could be, under the right circumstances, a facilitating practice. The most common and perhaps important are measures designed to increase the transparency of the market, i.e. improve participants' knowledge of rivals' competitive behaviour including the prices they actually charge. Good examples include: advance notice of non-binding price changes; meeting competition and most favoured nation clauses; resale price maintenance; delivered pricing; sharing non-complementary intellectual property rights; and, in some cases, building a web of joint ventures, strategic alliances, shared ownership and cross-directorships. Participating in industry associations could also be regarded as a facilitating practice especially where associations are used to promote or disguise the exchange of sensitive information, adoption of anti-competitive standards, or changes in government regulations which would facilitate co-ordinated interaction. This is not to say that all industry associations or all of their practices are anti-competitive. The point is merely that industry associations deserve close scrutiny in oligopolistic markets.

Some competition laws prohibit certain facilitating practices in oligopoly markets even when such practices are not being used in concert with any anti-competitive act. This should be done on a case by case basis since the same general type of practice could both enhance efficiency and facilitate co-ordinated interaction.

- *Facilitating practices are sometimes instituted and even required by various regulatory bodies. Competition agencies should advocate their removal unless absolutely necessary for some legitimate regulatory purpose.*

When telecommunication regulators, for example, require regulated companies to publish non-binding future price intentions, there is a risk this will facilitate price collusion. The same could be said of public tendering rules requiring prompt publication of all rather than just the winning bid. It should also be noted that government or private sector purchase through a tender procedure is rendered less competitive and more prone to co-ordinated interaction if product rather than performance criteria are specified. Competition agencies should point out that prices are likely to rise when facilitating practices are imposed, and be willing to work with regulators to develop satisfactory alternatives.

- *Prohibitions of horizontal exclusionary behaviour could help ensure that markets remain competitive rather than slide towards co-ordinated interaction enhancing oligopolistic structures.*

The principal enforcement problem as regards horizontal exclusionary behaviour, predatory pricing for example, is to distinguish between vigorous, efficiency enhancing competition, which often harms competitors, and rivalry intended or having the effect of permanently excluding competitors from the market so as to reduce competition. Properly applied, however, prohibitions of horizontal exclusionary behaviour could play a valuable role in preventing the emergence or strengthening of co-ordinated interaction.

Structural Remedies

- *Because of difficulties inherent in proving collusion and problems in devising remedies for weaker forms of co-ordinated interaction, most countries' competition laws supplement behavioural with structural measures. Chief among them is merger review.*

Merger review is undertaken in order to block or condition mergers that appear to have a significant potential to harm consumer interests. Some mergers create this risk by increasing an acquiring firm's unilateral ability to act in an anti-competitive fashion. Others threaten competition because they create market structures more conducive to collusion or other forms of co-ordinated interaction that might not themselves be illegal under a country's horizontal agreement or abuse of dominance prohibitions.

- *There are a number of factors whose presence considerably increases the probability of co-ordinated interaction because they affect firms' abilities and incentives to reach terms of co-operation and subsequently to detect and punish cheating on the arrangement.*

The factors likely to be of particular importance include: seller concentration levels; height of barriers to entry/expansion; degree of symmetry in products, costs, firm sizes and objectives; significance of economies of scale and sunk costs; industry phase of development; variability of market demand and incidence of cost shocks; size and frequency of purchases; prevalence of buyer power; the incidence of multimarket (either product or geographic) contact among leading firms; and degree of transparency and ability to commit to certain behaviours including punishment for cheating.

- *Determining a particular factor's effect on the probability of co-ordinated interaction and assessing the impact of all factors taken together is very much a case by case exercise. Economic analysis can help identify relevant factors and provide a framework for analysing their influence, but economic*

theory will seldom provide an off the shelf model yielding reliable predictions in a specific situation facing a competition agency.

While there is no broadly applicable framework that could be used to aggregate the effects of the many factors impinging on the probability of co-ordinated interaction, there appears to be a consensus that such behaviour is unlikely to occur if concentration and barriers to entry are sufficiently low. Some countries build safe harbours around those two factors, but it must be conceded that there is a certain degree of arbitrariness in their definition. It is difficult to determine what constitute safe levels of concentration and barriers to entry, and the answer could well differ from market to market.

- *Some countries take action against mergers predicted to substantially lessen or prevent competition. Others block or seek to modify those believed to create or strengthen a dominant position. From the point of view of prohibiting mergers significantly increasing the risk of co-ordinated interaction, there may be little difference between the two types of tests. This assumes, however, that dominance is defined to include joint dominance, and that structural ties are not necessary in order to establish joint dominance.*

With regard to increased risk of co-ordinated interaction, there appears to be a question whether the substantial lessening test could be used to prevent a series of small mergers from eventually yielding an anti-competitive market structure. Such a set of mergers could at some point be halted in jurisdictions applying dominance based tests.

- *Required access to an essential facility could, in some instances, amount to a structural remedy when it is applied to expand the number of suppliers in an oligopolistic industry.*

As with all remedies for co-ordinated interaction, application of the essential facilities doctrine presents some important difficulties. Care must be taken not to discourage necessary network investments including, where feasible, the development of facilities based competition. Moreover, access terms must be set so as to permit efficient competition without subsidising entry by inefficient providers.

- *An optimal oligopoly policy may involve some difficult tradeoffs.*

A number of studies have shown that a modicum of concentration may be required in order to increase innovation activity, but that too much concentration could stifle it. The exact thresholds are of course difficult to estimate and could vary from market to market. There may also be a trade-off between the benefits of allowing firms to meet in order to adopt various pro-competitive standards and the costs associated with raising the risk of co-ordinated interaction.

NOTE DE SYNTHÈSE

par le Secrétariat

Au vu des débats qui se sont déroulés lors de la table ronde, des contributions des délégués et de la note de synthèse, on peut dégager les principaux points suivants :

- *Mutuellement conscients que leurs actions entraîneront une réaction de la part de leurs rivaux, les oligopoles ont tout intérêt à substituer une coopération anticoncurrentielle à une vive concurrence. Une telle attitude, désignée dans la suite de ce texte comme une « interaction coordonnée » est préjudiciable au bien-être. C'est particulièrement clair dans le cas de collusion.*

Les pertes de bien-être associées à l'interaction coordonnée sont qualitativement les mêmes que celles qu'induisent les situations de monopole, à savoir la hausse des prix, l'X-inefficience, le ralentissement de l'innovation et la moins grande variété de produits. Parmi les exemples d'interaction coordonnée autres que la collusion, on peut citer les prix directeurs, la fixation de prix livraison comprise et la viscosité des prix autour de certains pivots.

- *Il y a une différence considérable entre le désir de s'engager dans une interaction coordonnée et la possibilité de le faire avec succès. Il peut être difficile de s'entendre sur des conditions mutuellement acceptables de coopération et de s'assurer que les sociétés ne s'écartent pas de ces conditions.*

Des oligopoles susceptibles de pratiquer la coopération pourraient avoir des coûts différents et être confrontés à des conditions également différentes de la demande. Même si ces différences peuvent ne pas poser de véritable problème s'opposant à une coordination anticoncurrentielle dans le cadre d'une rivalité ne portant pas sur les prix, elles peuvent poser aux firmes des difficultés pour s'entendre sur des niveaux de prix mutuellement avantageux ainsi que sur des écarts de prix entre les différents biens proposés. Même lorsque les firmes parviennent à résoudre ces questions, le succès de la coopération sur les prix n'est pas assuré. Une fois que le prix a été rehaussé de façon importante au-dessus du coût marginal, chaque firme composant l'oligopole aura intérêt à baisser ses prix surtout si elle est convaincue que cela passera inaperçu et qu'elle ne subira pas de représailles. Une coopération durable exige souvent que l'oligopole se donne toutes les chances de détecter ce type de comportement et fasse comprendre aux tricheurs qu'ils seront punis à coup sûr, le tout en évitant d'être poursuivi pour comportement anticoncurrentiel.

[En dépit des difficultés évidentes, on sait qu'il existe des ententes de grande envergure et établies de longue date, comme le prouve la multiplication des poursuites à l'encontre de telles ententes dans un nombre de pays Membres de l'OCDE].

Les recours comportementaux

- *Le principal recours comportemental face à une interaction coordonnée réside dans l'interdiction des collusions assortie d'amendes importantes, voire, dans certains pays, de peines d'emprisonnement. En raison de la lourdeur des sanctions, ceux qui se livrent à des collusions évitent en général de donner*

des preuves directes de contacts anticoncurrentiels. De ce fait, il est difficile de détecter et de prouver la collusion, ce qui explique pourquoi les autorités chargées de la concurrence sont souvent obligées de s'appuyer sur des preuves indirectes. Toutefois, les preuves de parallélisme des comportements ne sont pas et ne doivent pas être considérées comme des preuves suffisantes de collusion.

Les preuves indirectes les plus courantes portent sur le parallélisme étroit des comportements. Le problème juridique et économique de ce type de preuve est que le parallélisme des comportements peut avoir d'autres causes que la collusion. Dans des conditions oligopolistiques, les mouvements parallèles de prix, par exemple, peuvent en effet avoir pour seule origine un comportement indépendant mais rationnel. Pour convaincre les tribunaux qu'un parallélisme des comportements émane d'une forme quelconque d'accord mais ne résulte pas uniquement d'une interdépendance oligopolistique, les autorités de la concurrence doivent en général démontrer que quelque chose de plus s'est passé, et établir l'existence d'un ou de plusieurs éléments « à charge ». Il s'agit essentiellement de modes de comportement qui ne seraient pas rationnels sur le plan économique en l'absence d'une forme quelconque d'accord entre les concurrents. Les tribunaux ont également jugé recevables les éléments tendant à prouver qu'une structure particulière de marché facilite les collusions. Cette attitude des tribunaux peut cependant évoluer, car on admet de plus en plus qu'une structure de marché qui incite à la collusion, facilite également d'autres formes de coopération qui sont loin de correspondre à un tel comportement. Certains tribunaux ont tendance à estimer que les sociétés ne prendraient pas les risques juridiques d'une collusion si elles pouvaient obtenir les mêmes résultats d'une façon plus souple et moins risquée.

Certains pays de l'OCDE ont réagi aux problèmes que pose l'établissement d'une preuve de collusion en élargissant leur maillage à l'interdiction des « pratiques concertées » et dans quelques pays, des "pratiques tendant à faciliter la concertation" (voir ci-après) également. La loi sur la concurrence d'un pays va même plus loin en prévoyant des présomptions selon lesquelles certains actes constituent une preuve de collusion même s'il n'y a pas eu d'accord explicite.

Des tentatives d'élargir le champ d'application de l'interdiction des ententes horizontales anticoncurrentielles et de réduire les charges de la preuve pourraient aboutir dans certains pays à l'interdiction effective du type de parallélisme des comportements que l'interdépendance oligopolistique encourage fortement. Mais on ne saurait éradiquer les comportements parallèles induits par cette interdépendance par des mesures comportementales sans réglementation permanente du comportement concurrentiel, remède qui serait alors pire que le mal.

- *Afin d'augmenter les chances de réussite d'une collusion, et notamment pour améliorer les chances de détecter et de punir les tricheurs, les sociétés coopérantes peuvent employer ce que l'on nomme « des pratiques de nature à faciliter l'interaction coordonnée ». Certains pays interdisent ces pratiques, les considérant soit comme des abus de position dominante, soit comme des pratiques constituant en soi des accords anticoncurrentiels. Dans d'autres pays, elles font partie des éléments à charge tendant à servir de preuve indirecte de l'existence d'un accord.*

Presque tous les comportements qui facilitent la coopération des oligopoles pourraient constituer, lorsque les conditions s'y prêtent, des pratiques de nature à faciliter l'interaction coordonnée. Les plus courants et peut-être les plus importants sont les mesures visant à accroître la transparence du marché, c'est-à-dire améliorer la connaissance par les participants du comportement concurrentiel de leurs rivaux, notamment la connaissance des prix qu'ils pratiquent réellement. On peut citer plusieurs exemples : la notification préalable de changements de prix non contraignants ; le respect des clauses d'alignement sur la concurrence et de la nation la plus favorisée ; les prix imposés ; la fixation de prix livraison comprise ; le partage de droits de propriété intellectuelle non complémentaires ; et dans certains cas, la constitution d'un réseau de co-entreprises, d'alliances stratégiques, de participations et de directions croisées. La participation à des associations professionnelles pourrait également être considérée comme une pratique de

nature à faciliter l'interaction coordonnée, surtout lorsque lesdites associations sont habituées à promouvoir, ou au contraire à dissimuler, l'échange d'informations sensibles, l'adoption de normes anticoncurrentielles, ou des changements de réglementations gouvernementales de façon à faciliter une interaction coordonnée. Il ne s'agit pas de dire que toutes les associations professionnelles ni que toutes leurs pratiques sont anticoncurrentielles. Il s'agit seulement de préciser que les associations professionnelles méritent un suivi attentif sur les marchés oligopolistiques.

Quelques lois de la concurrence interdisent certaines pratiques de nature à faciliter l'interaction coordonnée sur des marchés oligopolistiques même lorsque ces pratiques ne sont pas utilisées de concert dans une démarche anticoncurrentielle. Il faudrait procéder au cas par cas puisque le même type général de pratiques peut à la fois améliorer l'efficience et faciliter l'interaction coordonnée.

- *Les pratiques de nature à faciliter l'interaction coordonnée sont parfois mises en place et même imposées par différentes autorités de tutelle. Les autorités chargées de la concurrence devraient préconiser leur suppression, sauf nécessité absolue justifiée par un objectif légitime de la réglementation.*

Lorsque les autorités de tutelle des télécommunications par exemple exigent des sociétés placées sous leur responsabilité qu'elles rendent publiques, sans engagement de leur part, leurs intentions en matière d'évolution des prix, il y a un risque que cette exigence facilite une collusion sur les prix. On peut en dire autant des règles concernant les marchés publics qui imposent la publication rapide de toutes les soumissions et pas uniquement de celle qui est retenue. Il faut également noter que des achats publics ou privés par le biais d'un appel d'offres sont moins concurrentiels et se prêtent davantage à une interaction coordonnée si l'on fixe des critères de produits plutôt que de résultats. Les organismes chargés de la concurrence devraient faire valoir que les prix ont toutes les chances d'augmenter lorsque l'on impose des pratiques de nature à faciliter l'interaction coordonnée et elles devraient rechercher avec les autorités de tutelle sectorielles des solutions de rechange satisfaisantes.

- *L'interdiction des comportements horizontaux d'exclusion permettrait de garantir que les marchés restent concurrentiels et n'évoluent pas lentement vers les structures oligopolistiques favorisant une interaction coordonnée.*

Le problème essentiel de mise en application des décisions concernant les comportements horizontaux d'exclusion, comme les prix d'éviction, consiste à faire la différence entre une concurrence rigoureuse qui améliore l'efficience, et qui est souvent préjudiciable aux concurrents, et une rivalité ayant pour objectif ou comme effet d'exclure durablement les concurrents du marché, de façon à limiter la concurrence. Lorsqu'elle est correctement appliquée, cependant, l'interdiction des comportements horizontaux d'exclusion peut jouer un rôle précieux en empêchant l'émergence ou le renforcement de l'interaction coordonnée.

Recours structurels

- *En raison des difficultés inhérentes à l'établissement de preuves de collusion et des problèmes de mise au point de recours contre les formes atténuées d'interaction coordonnée, la plupart des lois sur la concurrence complètent les mesures comportementales par des mesures structurelles. La plus importante mesure structurelle réside dans la procédure d'examen des fusions.*

L'examen des fusions est entrepris afin de bloquer ou de soumettre à condition des opérations de fusion de nature à porter gravement atteinte aux intérêts des consommateurs. Certaines fusions comportent ce risque en augmentant la capacité unilatérale de la société acquérante d'agir de façon anticoncurrentielle.

D'autres menacent la concurrence parce qu'elles créent des structures de marché qui favorisent davantage la collusion ou d'autres formes d'interaction coordonnée qui pourraient ne pas être illégales en soi au regard de la réglementation d'un pays interdisant les ententes horizontales ou l'abus de position dominante.

- *Il y a plusieurs facteurs dont la présence augmente considérablement la probabilité d'une interaction coordonnée parce qu'ils affectent la capacité des sociétés ainsi que leur intérêt à s'entendre sur des conditions de coopération et par la suite à détecter et punir le non-respect des engagements.*

Parmi les facteurs susceptibles de revêtir une importance particulière, on retiendra : le niveau de concentration des vendeurs, le niveau des obstacles à l'entrée et à l'expansion ; la plus ou moins grande symétrie des produits, des coûts, des tailles d'entreprises et de leurs objectifs ; l'ampleur des économies d'échelle et des coûts irrécupérables ; la phase de développement du secteur, la variabilité de la demande de marché et l'incidence des chocs sur les coûts ; le volume et la fréquence des achats ; la présence de gros acheteurs ; l'intensité des contacts sur plusieurs marchés (de produits ou géographiques) entre sociétés dominantes ; le degré de transparence et la capacité d'adopter certains comportements, notamment les représailles en cas de tricherie.

- *Déterminer les effets produits par un facteur en particulier sur la probabilité d'une interaction coordonnée et évaluer l'impact de tous les facteurs pris ensemble est essentiellement un exercice au cas par cas. Les analyses économiques peuvent contribuer à identifier des facteurs pertinents et fournir une grille d'analyse de leur influence, mais la théorie économique permet rarement d'obtenir un modèle tout prêt donnant des prévisions fiables dans une situation spécifique à laquelle est confrontée une autorité de la concurrence.*

Même s'il n'y a pas de cadre généralement applicable que l'on peut utiliser pour agréger les effets de plusieurs facteurs influençant la probabilité d'une interaction coordonnée, il semble se dégager un consensus selon lequel l'interaction coordonnée n'a guère de chance de se produire si la concentration et les obstacles à l'entrée sont suffisamment bas. Certains pays ont prévu des marges de tolérance autour de ces deux critères, mais l'on doit admettre qu'il y a un certain arbitraire dans leur définition. Il est difficile de déterminer ce qui constitue un niveau sûr de concentration et d'obstacles à l'entrée, et la réponse peut fort bien être différente d'un marché à l'autre.

- *Certains pays prennent des mesures contre les fusions dont on prévoit qu'elles vont substantiellement affaiblir ou empêcher la concurrence. D'autres pays bloquent ou cherchent à modifier les fusions considérées comme créant ou renforçant une position dominante. Du point de vue de l'interdiction des fusions ayant pour effet d'accroître considérablement le risque d'une interaction coordonnée, ces deux types de critères ne sont sans doute pas très différents. Cela suppose néanmoins que la définition de la position dominante englobe l'exercice conjoint d'une position dominante et que l'existence de liens structurels n'est pas nécessaire pour conclure à l'exercice conjoint d'une position dominante.*

En ce qui concerne l'augmentation du risque d'interaction coordonnée, il semble qu'il s'agisse de savoir si le critère d'affaiblissement substantiel de la concurrence pourrait servir à s'opposer à une série de petites fusions susceptibles d'aboutir à la mise en place d'une structure de marché anticoncurrentielle. Une telle série de fusions pourrait être "stoppée" dans des pays qui appliquent des critères fondés sur la notion de domination.

- *Imposer l'accès à une installation essentielle pourrait dans certains cas revenir à un recours structurel si on l'applique pour augmenter le nombre de fournisseurs dans un secteur oligopolistique.*

Comme pour tous les recours à l'encontre d'une interaction coordonnée, la mise en œuvre de la doctrine des installations essentielles pose quelques problèmes importants. Il faut en effet veiller à ne pas

décourager les investissements de réseau nécessaire et notamment, le cas échéant, le développement de la concurrence fondée sur les installations. En outre, les conditions d'accès aux installations doivent être précisés de façon à permettre une concurrence efficiente sans subventionner l'entrée de fournisseurs inefficients.

- *Une politique optimale à l'égard des oligopoles peut impliquer des compromis difficiles.*

D'après plusieurs études, il peut être utile qu'un secteur présente une certaine concentration pour stimuler l'innovation, mais une trop grande concentration peut étouffer l'innovation. Les seuils exacts sont évidemment difficiles à déterminer et peuvent varier d'un marché à l'autre. Il y a également un compromis à trouver entre les avantages qu'il y a à laisser les sociétés se rencontrer pour adopter diverses normes de nature à favoriser la concurrence et les coûts associés à l'augmentation du risque d'interaction coordonnée.

BACKGROUND NOTE

1. Introduction

When firms know they are highly interdependent, how can competition authorities help ensure they compete instead of find various ways to co-operate? That, in essence, is the "oligopoly problem" confronting competition offices everywhere, especially in markets where collusion is particularly profitable and easy. Obviously, part of the solution is to prosecute and heavily sanction explicit collusion. Unfortunately, the more effective this is, the more firms interested in colluding will tend to substitute other means of co-operation which do not produce the kind of evidence prosecutors need to win a cartel case. To a limited extent such behaviour can be addressed with an expanded definition of what constitutes an agreement. This approach will eventually, however, reach limits beyond which it becomes a largely futile attempt to make firms ignore their interdependence and refrain from acting as rational profit-maximisers.

A better way to address the oligopoly problem would be to supplement strict laws against explicit collusion with measures focused more on prevention rather than cure. In specific, policies should be aimed at altering the structural, informational and behavioural characteristics or factors determining the incentives and abilities of leading firms to substitute co-operation for competition. The primary purpose of this paper is to identify and assess such factors. Its secondary aim is to apply what was learned about the factors to assist competition agencies in reducing the incidence and severity of anti-competitive co-operation. The remainder of this section of the paper will dwell on briefly exploring various methods of co-operation, and introducing alternative ways of resolving the oligopoly problem.

The paper will make considerable reference to merger review because this is the context in which competition agencies have most directly faced the need to analyse the probability of anti-competitive co-operation. The paper does not, however, constitute an exhaustive treatment of merger review. In particular, it should be clarified that mergers should not automatically be prohibited merely because they increase the probability of anti-competitive co-operation. The decision to block a merger cannot be taken without considering as well its impact on unilateral power to harm competition, plus various efficiencies unique to the merger.

1.1 Explicit Collusion and Other Forms of Co-ordinated Interaction

The most straightforward, harmful and severely sanctioned type of anti-competitive co-operation is explicit collusion, i.e. competitors communicate in order to reach explicit terms of agreement to reduce competition. Explicit collusion includes more than agreements to raise price through cutting output. There are at least two other forms it can take. Kantzenbach et al. (1995, 13) refer to these as capacity collusion and market-area collusion. By capacity collusion they intend: "...a collective limitation of the amount of productive capacity in a particular market: either existing capacity is closed down or an expansion of capacity which would be efficient under competitive conditions is suppressed." By market area collusion they mean:

> …agreements or tacit understandings which divide up markets either by product type or by region. Suppliers behave collusively by each choosing to specialize in certain market segments, and by reciprocally recognising the specialisations chosen by others.

Explicit collusion is not equally likely in all market structures. Absent some kind of government regulation, it is improbable unless a small number of firms each account for a significant share of the market, i.e. it is unlikely except in oligopolies.[1] A formal definition of oligopoly is: "...a market structure with a small number of sellers - small enough to require each seller to take into account its rivals'current actions and likely future responses to its actions." [2] Recognised interdependence is the hallmark of oligopoly.[3] In this paper, we expand the term oligopoly to include markets where there is a small group of "leading firms" plus a considerable number of smaller firms constituting a competitive fringe. The "leading firms" constitute the subset of suppliers whose competitive behaviour significantly depends on what they think rivals will do in response to their own decisions.

In terms of economic effect, explicit collusion may not be much different than other forms of co-operation among leading firms. As Chamberlin put it:

> If each [competitor] seeks his maximum profit rationally and intelligently, he will realise that when there are only two or a few sellers his own move has considerable effect upon his competitors, and that this makes it idle to suppose that they will accept without retaliation the losses he forces upon them. Since the result of a cut by any one is inevitably to decrease his own profits, no one will cut, and although the sellers are apparently independent, the result is the same as though there were a monopolistic agreement between them.[4]

Winckler and Hansen (1993, 789) similarly observed, "Where certain market conditions are met, oligopolistic interdependence may translate into supracompetitive pricing without formal collusion."[5] This point has also been recognised in the area of merger review policy.[6]

Anti-competitive co-operation, whether consisting of explicit collusion or other methods having similar effects, will henceforth be referred to as "co-ordinated interaction", and be defined as: "...actions by a group of firms that are profitable for each of them only as a result of the accommodating reactions of the others."[7] Co-ordinated interaction is the behaviour responsible for "co-ordinated effects" which were well defined by Professor Willig in the course of discussing U.S. merger review practice:

> It may be useful as a matter of terminology to divide theories of possible anti-competitive effects of mergers into two categories: unilateral effects and co-ordinated effects....Co-ordinated effects are changes in the actions of the merging firms that would be profitable for them as a result of the merger only if the changes are accompanied by alterations in the actions of the non-parties that are motivated in part by fears of reprisals. The leading example of co-ordinated effects is the elevation of prices charged by the merging firms, along with those charged by the non-parties, where the merger enables tacit collusion to become stable. Here, the price increases are profitable because deviation by a firm would likely trigger retaliatory price decreases.[8]

Many OECD Members' competition statutes make reference in their abuse of dominance and/or merger review provisions to "collective dominance". Anti-competitive behaviour by collectively dominant firms is very similar to co-ordinated interaction. Further detail on this point as it relates to merger review is contained in Annex I.

In addition to explicit collusion, another prominent example of co-ordinated interaction is price leadership, described by Scherer and Ross (1990, 248) as:

> …a set of industry practices or customs under which list price changes are normally announced by a specific firm accepted as the leader by others, who follow the leader's initiatives. Wide variations are possible in the stability of the leader's position, the reasons for its effectiveness as leader, its influence over the other firms, and its effectiveness in leading the industry to prices that maximise joint profits.

A particularly interesting example of price leadership, because the price leader was itself subject to price regulation, may have occurred in the American long distance telephone market. According to Jerry Hauseman, in the early 1990s AT & T acted as the price leader for followers MCI and Sprint. In specific, he pointed to early 1993 when an accounting standards change caused AT & T's price cap to be relaxed due to a once over charge for retirement costs. AT & T raised its prices and MCI and Sprint quickly followed. In a presentation before the U.S. telecommunications regulator, Mr. Hauseman pointed out that this is not what one would have expected if there were vigorous competition between the three firms. He noted that the accounting charge did not represent a change in economic (i.e. marginal) costs, and in any case, neither MCI nor Sprint, as relatively new companies, had many people retiring. Under normal competitive conditions, AT & T should not have been able to raise prices in a situation where its rivals' economic costs had not risen.[9]

In addition to price leadership, other common tell-tale signs of co-ordinated interaction are: widespread use of rules of thumb such as full-cost and delivered pricing; stickiness around certain focal point prices; and a pattern of tolerating extensive order backlogs or inventory build-ups in place of reliance on frequent price changes to accommodate fluctuations in demand.

1.2 Reducing the Incidence of Co-ordinated Interaction

Although strict prohibition and strong sanctions probably reduce the incidence of explicit collusion, continuing cases are good evidence that firms still find it profitable to engage in the practice. This is perhaps due to a low probability that collusion will actually be detected and punished. Firms are naturally careful not to create good evidence of such agreements. Further exploring this enforcement problem is beyond the scope of the current paper. It should be noted, however, that even if enforcement were 100 percent effective, this would not necessarily put an end to co-ordinated interaction. It could simply cause firms to opt for substitutes which are less likely to attract legal sanction and offer the further advantages of greater flexibility and lower costs to arrange.[10]

The fact that co-ordinated interaction falling short of reaching explicit terms of agreement is arguably legal in many countries is not traceable to some inexplicable gap in antitrust coverage. The omission can be traced to difficulties in devising a suitable remedy. Once firms are aware of their interdependence they cannot be expected or easily compelled to ignore that in deciding their competitive behaviour.[11]

Some competition offices have, at least in theory, a direct "remedy" for co-ordinated interaction. They are empowered to impose price controls in response to "high pricing" considered as an abuse of dominance (defined to include collective as well as single dominance). As with all price regulation, such controls are fraught with difficulties. Unless there is a competitive reference market available, competition authorities will have to set prices based on some notion of costs and these can be very hard to estimate especially if there are joint products and technology is rapidly changing. In any case, even if prices can be set at correct levels, there will still be the ongoing headache of having to monitor actual pricing behaviour and quality levels as well. Faced with these significant difficulties, competition agencies would be wise either to avoid using price controls to address oligopoly pricing, or at least to combine such controls with other means of getting at the root of the problem.

One such other means is forced division of leading firms. As with price control, this too is a cure that is probably worse than the disease. Even occasional reliance on forced division could cause large firms to be very hesitant about increasing their market share through efficiency improvements and prices set close to marginal costs. Moreover, whenever firms are forcibly divided, important economies of scope and scale may be lost.[12]

There is a significant exception to what has been said concerning the wisdom of forced division of firms. In many countries, certain markets in the past were reserved to state owned vertically integrated firms. Good examples are found in: telecommunications; long distance and local distribution of natural gas; water and sewerage systems; railways; and electricity sectors. It is increasingly recognised that many such industries contain activities that could be organised as competitive markets. Introducing such competition is considerably facilitated by privatising state owned firms. Prior to privatisation, the government has an unusual degree of freedom in restructuring these firms so as to enhance competition.

By a process of elimination, and putting aside vigorous cartel enforcement, we are left with four reasonably good ways to reduce the incidence and severity of co-ordinated interaction: prohibit mergers which significantly increase the probability of co-ordinated interaction and fail to offer sufficient efficiency benefits; discourage the use of practices facilitating co-ordinated interaction; make appropriate divisions in state owned firms prior to their being privatised; and lower barriers to entry or otherwise widen the product or geographic dimensions of markets. All four of these will be explored further in Section IV of the paper.

The next section of the paper consists of a general introduction to factors affecting the probability of various forms of co-ordinated interaction. Section III then identifies and assesses thirteen such factors. Following the discussion of remedies in Section IV the paper concludes with some summary observations.

2. General Preconditions for Co-ordinated interaction

In addition to recognised interdependence, there appears to be another precondition which must be satisfied before there is a good probability that co-operation will replace competition in oligopoly markets. It is that barriers to entry/expansion be sufficiently high to make it profitable for leading firms to raise price by cutting back quantity supplied.

Merely noting that a market is characterised by both high concentration and high barriers to entry/expansion, is far from sufficient to justify predicting that its leading firms will engage in co-ordinated interaction. A much fuller appreciation of incentives and abilities to engage in such co-operation is needed and this is where George Stigler made an important contribution.

In place of assuming that it is reasonably easy for leading firms to collude, Stigler noted that they could face real difficulties in agreeing on the terms of their co-operation. In addition, if the agreement were successful in raising price above competitive levels, each firm would have an incentive to cheat on the price. Collusion would not last unless firms were able to detect and punish cheating. In short, collusion would only be a real possibility in situations where it would be reasonably easy to reach and police an agreement.

Economic theory has since evolved to show that incentives to cheat may be a good deal weaker than Stigler believed, provided the interdependent firms will be competing for an indefinite period of time. It remains critical, however, that co-ordinating firms be credibly able to detect and punish cheating. Moreover, game theory has highlighted the particular importance of factors determining or reflecting: the ability of firms' to commit to certain behaviour and communicate that commitment; the degree of heterogeneity among would be co-operators; and the level of uncertainty prevailing in the market.[13]

It has been widely recognised, especially in the context of merger review, that Stigler's insights apply not just to explicit collusion but to co-ordinated interaction in general.[14] For instance, in the United States 1992 Horizontal Merger Guidelines ("U.S. Merger Guidelines") we read:

> Whether a merger is likely to diminish competition by enabling firms more likely, more successfully or more completely to engage in co-ordinated interaction depends on whether market conditions, *on the whole*, are conducive to reaching terms of co-ordination and detecting and punishing deviations from those terms.[15]

This point of view has also been reflected in a recent study undertaken for the European Commission which considered how insights from the "new industrial economics" should be factored into merger review. Having earlier defined collusion as something very close to, if not identical with, co-ordinated interaction,[16] the study later noted that the factors:

> …inhibiting or encouraging collusion will need to be examined on four levels in order to assess the likelihood of collusion. On the first of these levels, one needs to establish whether there are incentives to form a collusive agreement at the outset. Then, moving on to assess the stability of a possible collusion, any incentives to cheat in that particular market must be investigated, together with the probability that cheating could go undiscovered, and the availability or otherwise of means of punishing deviants among colluding suppliers.[17]

3. Specific Factors Affecting the Probability of Co-ordinated Interaction

Before separately considering the many factors potentially influencing firms' incentives and abilities to engage in co-ordinated interaction, two important preliminary comments are in order. First, few of the pertinent factors are unidirectional, i.e. in different circumstances, they could either increase or reduce the probability of co-ordinated interaction. This usually arises from the fact that the same factor could influence two or more of the incentive and ability variables, but do so with opposite effects on the probability of co-ordinated interaction. Second, none of the factors considered individually can conclusively establish a high probability of co-ordinated interaction. This is why we emphasised the words "on the whole" when citing the U.S. Merger Guidelines in the previous section.[18] On the other hand, two factors probably could be used to construct safe-harbours. In specific, where either the leading firms' market shares or barriers to entry/expansion in the market are sufficiently low, co-ordinated interaction is highly unlikely to exist or at least to last.

Because of two way effects and interaction among factors, it is difficult to determine a logical order in which to present them. The order chosen below has no particular significance except that the safe-harbour related factors are mentioned first.

3.1 The number of leading firms and the percentage of the market they account for

Other things equal, the fewer the leading firms in a given market, the more likely are such firms to engage in some form of co-ordinated interaction. This is because a larger number of such firms means:

1. higher "transactions" costs required to engage in co-ordinated interaction – both the number of meetings or direct communications that might be required (explicit collusion)[19] and the costs of observing and adjusting to other firms' behaviour grow faster than the number of firms co-operating;

2. a lower degree of interdependence between the firms which in turn translates into less awareness of the need to co-ordinate plus a lower probability that firms will be able to distinguish between the effects of cheating and changes in market demand;

3. a greater chance that firms will have differing costs and other characteristics making it difficult to agree on a mutually profitable course of action (asymmetries are examined further below); and

4. closely related to the previous point, a greater chance that one of the leading firms will be, as Scherer and Ross (1990, 277) put it, "…a maverick, pursuing an independent, aggressive pricing policy." [20] (mavericks also receive further attention later)

Other things equal, and as long as suppliers experience significant economies of scale, the percentage of the market accounted for by the leading firms is positively related to the probability of co-ordinated interaction. This is because the smaller their market share the greater the percentage decline in output that the leading firms must suffer in order to raise price by a given amount. But the larger are such cutbacks, the more the unit costs of leading firms will be raised by the exercise, thus reducing its profitability. This problem is considerably aggravated if the pre-co-ordinated interaction price falls in the price elastic range of the demand curve.

Although we return later to economies of scale in order to discuss its impact on the vigour of price competition and related points, it is worth mentioning here that economies of scale and the percentage of the market enjoyed by the leading firms should generally be positively related. So from the perspective of increasing the probability of co-ordinated interaction, significant economies of scale tend to increase the need for the leading firms to account for a large market share and simultaneously help them achieve such shares.

In antitrust analysis, "fewness" and the share of the market accounted for by leading firms is usually referred to as "concentration" and is commonly measured as the share of the market accounted for by a given number of the largest firms. The more complex Herfindahl-Hirschman index (HHI) takes this a step further by also reflecting size asymmetries among suppliers.[21] The latter index actually mixes the effects of fewness and market share dispersion so overlaps into the asymmetries discussed below.

At least in the United States, and perhaps in some other Members, there has been a change towards de-emphasising concentration in estimating the probability of co-ordinated interaction.[22] This appears to be due to a greater appreciation of the important role played by barriers to entry and to other qualitative factors. Nevertheless, it remains true and proper that many countries employ concentration data both in setting up some kind of safe (or at least safer) harbours for mergers and as a factor to be considered along with others in estimating the probability of co-ordinated interaction for mergers outside the safe-harbours.[23]

Hay and Walker (1993, 43) have provided a good summary regarding the role of concentration:

> It is popular to down play the significance of concentration in the evaluation of competition. However…the most useful prediction provided by economic theory is that higher levels of concentration are likely to result in higher prices and losses in allocative efficiency. We know that other factors may offset the effect of concentration, that it is not a *sufficient* condition for the exercise of market power. However, it remains a *necessary* condition. Hence concentration measures provide a useful indicator of whether it is necessary to undertake a full market analysis in relation to any given merger.

3.2 High barriers to entry/expansion

The effects of barriers to entry/expansion are well developed in several countries' merger guidelines. *Considered on their own*, barriers to entry plus the barriers to expansion faced by firms on the competitive fringe, if there is one, appear to have a unidirectional effect. As such barriers drop, so generally does the profit pay-off to co-ordinated interaction. In fact, if barriers to entry/expansion are low enough, co-ordinated interaction is simply unprofitable, hence unlikely.

In general, barriers to entry and expansion are closely related, but there can be important exceptions. In the petroleum refining industry for example, high sunk costs create considerable barriers to entry (and exit). In contrast, barriers to expanding output of a given product could be very low, i.e. little or no capital investments are required to change the mix of products in a given plant.

Barriers to expansion *among leading firms* have a more ambiguous effect than barriers to entry. As such barriers to expansion decline, the leading firms' incentives to cheat should increase, but simultaneously so should their ability to punish cheating.

3.3 Evidence of co-ordinated interaction in other markets or in the same market in the past

Evidence of co-ordinated interaction, from any geographic market (including any country), could be useful in assessing the probability of such interaction in the market being investigated. [24] Its degree of relevance, however, depends heavily on similarities between the markets being compared, including the identity of the leading firms in each. [25] In the U.S. Merger Guidelines we read:

> It is likely that market conditions are conducive to co-ordinated interaction when the firms in the market previously have engaged in express collusion and when the salient characteristics of the market have not changed appreciably since the most recent such incident. Previous express collusion in another geographic market will have the same weight when the salient characteristics of the other market at the time of the collusion are comparable to those in the relevant market.[26]

This has also been recognised by the European Commission. Venit (1998, 1128) noted that: "In *Nestlé/Perrier* the Commission concluded on the basis of the evolution of prices in the five years preceding the merger that the incentive and possibility to increase prices jointly had already been recognised by the companies in the past and that the proposed concentration would facilitate and reinforce the likelihood of such a strategy."

3.4 Price elasticity of demand in the sub-market composed of the leading firms' products

In the course of reviewing a merger it is usually necessary to define the relevant market. This is primarily accomplished by considering consumers' willingness to substitute goods for those whose prices might rise post-merger. On the basis of such information, competition agencies might well be able to estimate the price elasticity of demand for the sub-market made up of the leading firms' products. Other things equal, a lower price elasticity of demand for the leading firms products' translates into greater incentives to engage in co-ordinated interaction, and lower incentives to cheat.[27] As alluded to while discussing concentration, the significance of the demand elasticity for the leading firms' group of products will be greater the more important are economies of scale in the industry.

3.5 Price elasticity of demand facing individual leading firms - the significance of product differentiation

Although a lower price elasticity of demand for the leading firms' products raises the probability of co-ordinated interaction, the opposite may be true concerning the impact of each of those firm's own elasticity of demand. The lower those individual elasticities, the greater the degree of product differentiation among the leading firms' offerings.

The conventional wisdom concerning product differentiation is that it renders co-ordinated interaction more difficult because it requires co-ordinating firms to resolve the tricky issue of determining and policing appropriate price differentials for their products. This point of view is reflected in at least two countries' merger guidelines,[28] and has been well described as follows:

> …fears of collusive activity are, by and large, confined to industries in which the products are relatively homogeneous, with little differentiation or customisation. This is because it is easier to fix a schedule of collusive prices when products are similar than when they all have different characteristics, sell at very different prices and can be modified for specific customer needs. [29]

In addition to creating price differential problems, product differentiation can also foment dissension by causing firms to prefer different overall price levels, even if they have the same, but upward sloping, marginal cost curves.[30]

Finally, it is argued that the more homogeneous are the leading firms' products, the higher the probability of vigorous, harmful (to producers) price competition, hence the greater the desire to co-ordinate in order to avoid such costly rivalry. It turns out, however, that this point is not as clear cut as it seems. Product homogeneity may indeed create greater incentives to co-operate, but it also raises the incentives to cheat.[31] Complicating things further, it simultaneously increases the ability to punish cheating.

There are several reasons for qualifying a supposed link between product differentiation and reduced probability of co-ordinated interaction. To begin with, the degree of product differentiation is not an immutable given. Recognising the threat it poses to co-ordinated interaction, leading firms could take pains to reduce the existing degree of product differentiation or at least limit its effects. For example, in the 1950s U.S. electric equipment conspiracy, price co-ordination focused on a standardised pricing formula book.[32] Firms could also agree on a set of common standards that have the effect of reducing product variety. [33] They might even lobby the government to adopt such standards for innocent purposes such as environmental protection.

Even when firms cannot readily reduce product differentiation, it might be more accurate to say that a high degree of product differentiation alters the form rather than diminishes the probability of co-ordinated interaction. Instead of co-ordinating on prices, firms could agree to divide the market by product type or geographical area, or opt for mutual restraint in terms of adding new capacity.[34] The first of those alternatives also has the advantages of making it easier to detect cheating and raising the probability that cheaters will be punished (because lower prices can be concentrated in a few well chosen market segments).

Kantzenbach et al. (1995, 17) deal at some length with the ways in which product differentiation could affect the probability of co-ordinated interaction and offer this general remark:

> …in markets with heterogeneous products and correspondingly low price-elasticity of individual demand functions, the incentive to cheat…tends to be lower. Firms need to offer relatively large

> price discounts or generally to step up their competitive efforts if they wish to increase the quantity of their products demanded. Cheating in these circumstances is not very profitable. However, whether a high elasticity in the demand facing individual firms actually reduces the danger of collusion in practice needs to be decided on a case-by-case basis. Because the breakdown of collusion in such circumstances would threaten to unleash particularly fierce competition, the fear of such a breakdown may be sufficient to maintain and stabilise collective dominance. The important question here is whether companies can be assumed to have appreciated the long-turn benefits to themselves of collusive behaviour, and how far the firms concerned look ahead when taking their entrepreneurial decisions.

We tentatively endorse the conventional view that product differentiation reduces the probability of co-ordinated interaction, but recognise that this insight requires cautious application.

3.6 Production cost and vertical integration asymmetries

Significant product differentiation is not the only possible cause of difficult to accommodate differences in preferred general price levels. Potential conflicts can also be rooted in different marginal cost curves linked to things like different production techniques.[35] Cost differences, whatever their cause, not only make co-ordination more difficult, they can also directly reduce incentives to co-operate at least as regards the more efficient firms. As Kantzenbach et al. (1995, 61) express it:

> Suppliers' cost structures constitute the key component in assessing asymmetry of interests. If any one company within an oligopoly shows persistent cost advantages this is particularly likely to militate against a harmony of interests and to create an incentive for aggressive competitive behaviour.

Different degrees of vertical integration could also be a source of co-ordination inhibiting cost differences.[36] They could even have a double impact because buyers may generally prefer to deal with firms they do not compete with, i.e. vertical integration may effectively add to product differentiation.[37]

3.7 Asymmetry in firm sizes

Quite aside from their probable link with differences in cost effectiveness and consumer preferences, asymmetry in sizes of leading firms could have a direct impact on the probability of co-ordinated interaction. There could be a general relationship between the size of a firm and its costs of capital. This could translate into leading firms having different abilities to withstand a price war. In an extreme case, favourable access to additional finances could even lead one or more firms to believe that they could decisively win a price war (i.e. be able to raise price after rivals have exited, which of course depends on sufficiently high barriers to entry). Such firms would naturally have a lower incentive to co-operate with their rivals. Moreover, sufficient variations in costs of capital will create divergent views concerning the trade-off between present and future profits. It is even possible that one or more firms could attach such a low importance to future profits as to be quite willing to cheat even if this is virtually certain to lower future profits.[38]

3.8 Presence of a maverick competitor

The presence of a maverick firm, especially if it is one of the leading firms in a market, could very much affect the probability of co-ordinated interaction in a market. The U.S. Merger Guidelines contain a good discussion of the maverick firm phenomenon:

> In some circumstances, co-ordinated interaction can be effectively prevented or limited by maverick firms -- firms that have a greater economic incentive to deviate from the terms of co-ordination than most other rivals (e.g., firms that are unusually disruptive and competitive influences in the market). Consequently, acquisition of the maverick firm is one way in which a merger may make co-ordinated interaction more likely, more successful, or more complete. For example, in a market where capacity constraints are significant for many competitors, a firm is more likely to be a maverick the greater is its excess or divertable capacity in relation to its sales or its total capacity, and the lower are its direct and opportunity costs of expanding sales in the relevant market.
>
> This is so because a firm's incentive to deviate from price-elevating and output-limiting terms of co-ordination is greater the more the firm is able profitably to expand its output as a proportion of the sales it would obtain if it adhered to the terms of co-ordination and the smaller is the base of sales on which it enjoys elevated profits prior to the price cutting deviation. A firm also may be a maverick if it has an unusual ability secretly to expand its sales in relation to the sales it would obtain if it adhered to the terms of co-ordination. This ability might arise from opportunities to expand captive production for a downstream affiliate.[39]

Applying what has been said about this and the previous three-asymmetry factors (i.e. product differentiation, production cost/vertical integration asymmetries and differences in firm sizes) to merger analysis presents a challenge. The first thing to note is that, with one exception, mergers in which leading firms play no part do not change the degree of asymmetry in market shares among leading firms. The exception is when a merger of two or more non-leading firms produces a firm large enough to be included among the group of leading firms.

Where a merger does increase asymmetries among the leading firms in a market, it seems to be generally true, based on what was said above, that it will reduce the probability of co-ordinated interaction. Great caution is needed, however, in applying this generalisation to any particular merger. Consider, for example, a situation where the smallest of four leading firms in a market is a maverick. Under those circumstances, a merger between any of the other three firms might plausibly increase both asymmetry in leading firms' market shares and the probability of co-ordinated interaction. The suddenly increased size of its rivals might convert the maverick into a co-operative partner. On the other hand, if the maverick takes over any of the other three leading firms it could become less co-operative as a result, i.e. such a merger could simultaneously reduce asymmetry and the probability of co-ordinated interaction.

It is not surprising that various merger guidelines indicate some ambiguity about the overall effect of asymmetries. For example, the German merger checklist states:

> A symmetrical oligopoly consisting of firms with largely similar market shares, comparable resources and a comparable ease of access to the supply or sales markets tends to be uncompetitive, since any competitive action would be equally perceptible to all firms, easily detectable due to the transparency of the competitive conduct, and hardly promising because all the firms have a similar retaliatory potential.

Significantly, this is balanced a paragraph later with: "Asymmetry of an oligopoly, on the other hand, is not in itself a sufficient indication of substantial competition among the oligopolists, but asymmetrical oligopolies have a greater potential for individual competitive conduct."[40]

3.9 Economies of Scale and Sunk Costs

Where economies of scale are particularly significant, and especially where unit costs rise rapidly as output falls below technically optimal levels (i.e. capacity), firms will be especially ready to resort to price competition in order to prevent their outputs falling much below capacity. The effects of this phenomenon cannot be fully appreciated without noting that economies of scale are intimately bound up with sunk costs, i.e. irrecoverable investments. In addition, the more important are sunk costs the higher, typically, is the ratio of variable to fixed costs.

Putting this all together, one can generalise that the more significant are economies of scale, the more frequent and destructive price wars will tend to be. Prices can drop a long way before firms are no longer able to cover their variable costs. And with huge sunk costs, no firm wishes to permanently exit the market. Paradoxically, if all leading firms are aware of these points, and experience could be a good teacher, it might happen that significant economies of scale and important sunk costs help foster co-ordinated interaction. In other words, firms should understandably wish to avoid mutually destructive price competition.[41]

It must be borne in mind, however, that economies of scale and sunk costs also affect the probability of co-ordinated interaction through their impacts on incentives to cheat and abilities to punish cheating. Low marginal costs could make a minimal level of cheating attractive.[42] As for punishing cheating, marginal costs lying below average costs should facilitate that. Punishment could even take the form of prices being driven below competitive (i.e. minimum average cost) levels.

3.10 Degree of Transparency and Ability to Credibly Commit to Certain Behaviours

A market's degree of transparency can be loosely defined as the speed with which leading firms can reliably inform themselves of rivals' actions. Transparency generally contributes to the ease of reaching an "agreement", and decreases incentives to cheat by reducing the time before cheating is detected. [43] Leading firms have a strong incentive to increase transparency in their markets as well as to credibly commit themselves to co-operation enhancing conduct. We turn now to some ways in which they can either unilaterally or collectively accomplish this:

1. Establish industry associations (including research and information centres) and publish trade magazines;

Such associations increase transparency insofar as they are used to collect and disseminate information. Such associations give competitors a chance to meet and socialise so as to build mutual trust, and also afford them good opportunities to engage in explicit collusion.

2. Provide information either directly to competitors or to sufficient numbers of third parties that it is sure to come to the knowledge of competitors

Several types of information exchange are particularly conducive to facilitating co-ordinated interaction. Examples include regular provision of current, detailed sales or cost data and advance notice of non-binding price changes (especially in markets characterised by price leadership). Pre-announced price changes are a very low-risk hence attractive method of determining whether other firms are willing to change their prices in response to a first mover's announced intentions. Where other leading firms fail to make similar announcements within a reasonable period, the price changes can always be rescinded.

Sometimes regulators inadvertently offer significant help when it comes to increasing transparency. For example, they do this when they require firms to pre-publish their intended price

changes. As regards firms whose prices are regulated, such advance notice might be justified as a means of facilitating public discussion of requested rate changes. As for unregulated firms, such a requirement merely gives greater antitrust immunity to a somewhat suspect practice. Worse still, it automatically rules out surprise price cuts, thereby helping to stabilise co-ordinated interaction.

3. Standardise accounting categories and/or products and packaging;

All types of standardisation should generally make it easier for firms to reach various forms of "agreements".

4. Build structural links (discussed below) including sharing intellectual property rights.

Both the process and the results of such work are important in terms of improving transparency.

5. Employ delivered pricing systems

Carlton and Perloff (1990, 427) describe such systems as follows:

> A *delivered pricing* system specifies the total delivered price (inclusive of freight) that a buyer must pay as a function of the buyer's location: the price the buyer pays does not depend upon the location of the seller. A delivered pricing system can be created by specifying the total delivered price as the sum of a going market price at some specified location -- the so-called *basing point* -- plus freight from that location.

6. Vertically integrate towards final consumers and/or practising minimum resale price maintenance (RPM)

Final prices are easier to observe than manufacturer prices, but without vertical integration or RPM, changes in final prices cannot necessarily be attributed to the product supplier, i.e. variation could instead be due to changes in distributor margins.

7. Include meeting competition and most favoured nation clauses in sales contracts

Sellers can use meeting competition clauses to contractually commit themselves to meet, sometimes retroactively, more favourable terms offered by other suppliers. Meet or release clauses are tamer versions of the same thing.

Meeting competition clauses are particularly useful devices because they have the effect of converting buyers into monitors of co-ordinated interaction. When such clauses are ubiquitous in a market, each leading firm will know that cheating will be quickly detected and that its rivals are contractually obligated to "punish" it. Being able to commit to punish cheating is important because potential cheaters know that rivals have a greater willingness to threaten than to deliver expanded outputs and lower prices in the event of cheating.

As for most favoured nation clauses, such contractual arrangements could significantly reduce sellers' incentives to engage in secret price discrimination, i.e. cheating.

8. Encourage parties purchasing by auction to use standardised tenders (i.e. specific product rather than performance characteristics) and publicly announce winning bids in auctions.

Such practices, commonly adopted by government buyers in order to reduce corruption and ensure fairness in awarding contracts, could end up being very costly if they make it considerably easier for suppliers to engage in co-ordinated interaction, especially when such companies are few and frequently interact. They could also be quite misguided given that there is no necessary trade-off between preventing corruption and enhancing competition. As stated in the background paper for a recent OECD Competition Law and Policy Committee roundtable discussion:

> Corruption is possible only as a result of the monopoly rents that may be earned. Reducing the monopoly rents reduces the funds available for bribery and therefore the incidence and the seriousness of corruption. Promoting competition therefore reduces corruption.[44]

9. Create close linkages among leading firms

There are a host of ways falling short of actual ownership links which leading firms employ to make themselves more similar and transparent to rivals, and simultaneously credibly commit themselves to a more co-operative relationship with them. They include: cross directorships with or without partial cross shareholdings (falling short of control); sharing intellectual property rights including R & D joint ventures, patent pooling and extensive use of grantbacks;[45] shared ownership of suppliers or distribution channels; and production specialisation agreements.

Cross-licensing of intellectual property rights should be watched closely especially where the parties do not absolutely require access to each other's technology in order to compete. Attention should also be paid to the terms of grantbacks under which licensees agree to share with licensors any improvement patents they may register.[46]

To a greater or lesser degree, all nine of the above listed practices could be justified as innocent means of improving efficiency and potentially benefiting consumers. Nevertheless, because of their effects on transparency and enhancing the ability to credibly commit to enhancing co-operation, they also raise the probability of co-ordinated interaction. This is especially so in markets characterised by high levels of concentration, high barriers to entry, and other factors favouring co-ordinated interaction.

3.11 Industry's Phase of Development and Variability of Market Demand

Collusion is generally favoured by the prospect of stable, long run profits, and is more difficult in the absence of such a prospect.[47] It follows that the probability of co-ordinated interaction could differ according to an industry's phase of development and the variability of market demand. Gugler (1998, 925) noted that:

> In the [early] phase[s] of experimentation and expansion of a market, the conditions for competition are subject to constant changes and hardly favour any durable room for 'manoeuvre'. On the other hand, in the maturation and stagnation phase[s], market conditions hardly change, thus favouring the adoption of collusive behaviour. For example, in the Nestlé/Perrier case, the European Commission considered that market stability, in particular technological maturity of the market, facilitates collusion between companies. Nevertheless, if the market has reached its final stage (end of the product and/or technology life cycle), the conditions favouring the adoption of individual behaviour are again fulfilled. In fact, in the end phase of product and/or technology life cycles, the enterprises will be less likely to adopt or to keep up a collusive behaviour, since future co-operative profits are uncertain, if not zero, because the end of the game is announced and relatively foreseeable.

It should also be noted that in the earlier stages of an industry's development there are a larger number of factors on which firms could compete, plus overall growth is much quicker. In consequence, co-ordination will be both more difficult and less necessary at the earlier than at the later stages.

In addition to stage of development, the general variability of market demand is important. The less variable is market demand the higher, other things equal, is the probability of collusion.[48] This is because with relatively stable market demand, firms can more reliably infer cheating from large fluctuations in their own sales. Moreover, the average incidence of excess capacity is likely to rise with the degree of variability in market demand, but it is difficult to predict how this could affect the probability of co-ordinated interaction. Excess capacity implies very low marginal costs which should encourage cheating, but it simultaneously should make it easier to punish cheating.

3.12 Presence of Large Buyers and the Influence of the Size and Frequency of Purchases

To the extent that orders are lumpy, large and infrequent, there will be a lower probability of co-ordinated interaction. This is because firms have a greater incentive to cheat when just a few special price deals result in a large increase in market share. Such cheating is hard to detect and even if it is observed, rivals may have to wait a considerable time before having an opportunity to punish it with price drops of their own. Things are considerably less propitious for co-ordinated interaction in markets where significant increases in market share would require frequent "secret" discounting involving a large number of buyers. [49]

The importance of large buyers, especially in merger review, is often linked to the ability of such buyers to defend themselves against an anti-competitive price increase. As Denis (1992, 9) points out, this is something quite different than their affect on co-ordinated interaction.

> The relevance of big buyers to co-ordinated interaction does not stem from their sophistication or the self-proclaimed ability to protect themselves. Instead, the issue is whether sellers will have the incentive to deviate from terms of co-ordination because the gains from securing a large long-term contract outweigh any losses from being caught after the fact.

3.13 Degree of multimarket (either product or geographic) contact between leading firms

The more numerous the markets in which leading firms interact, the more likely are they to engage in co-ordinated interaction. Kantzenbach et al. (1995, 73-74) explain this as follows:

> Multi-market contacts, allow suppliers to obtain additional information about their competitors, they make it easier to engage in concerted action, and they offer additional means of retaliation if another firm is found to have cheated. The interdependencies between competitive situations in different marketplaces and the incentives thus generated, and also the special opportunities to communicate for the suppliers operating in these markets ought…to have a substantial influence on how the probability of [explicit and implicit] collusion is assessed.

Multi-market contacts are allegedly helping U.S. airlines to engage in co-ordinated interaction.[50]

Summary Conclusions re factors

There are a few general points which should be made concerning the above list of thirteen factors:

1. when identifying and assessing factors affecting the probability of co-ordinated interaction, it is certainly helpful to focus on leading firms' incentives and ability to reach an agreement as well as to cheat on it, plus their ability to detect and deter cheating;

2. the same factor can sometimes have opposite effects on different dimensions of firms' incentives and abilities to co-ordinate their behaviour;

3. since many factors interact with one another, their combined effect must be determined by considering them together rather than by looking at them one by one; and

4. it could frequently be the case that one or more factors in a particular market support predicting a high probability of co-ordinated interaction, while others point in the opposite direction. Unfortunately, it is not possible to generalise concerning how a total assessment should be made in such situations, i.e. there is no universal weighting that can be attached to the factors.

Despite the last point, there may be markets where concentration or barriers to entry are sufficiently low that co-ordinated interaction can be ruled out. In all other situations, a careful investigation will be needed, covering as many as possible of the different factors (and being open to new ones) before a reliable assessment can be made of the probability of co-ordinated interaction.[51] The need to cover a wide range of factors is well illustrated in several merger and non-merger case examples included in Annex II of the paper.

4. Ways Competition Agencies Can Reduce the Incidence and Severity of Co-ordinated Interaction

Aside from enforcing prohibitions against explicit collusion (which largely lies outside the scope of the current paper), there appear to be four reasonably good ways to reduce the incidence and severity of co-ordinated interaction: prohibit mergers which significantly increase the probability of co-ordinated interaction and fail to offer sufficient efficiency benefits; discourage the use of practices facilitating co-ordinated interaction; make appropriate divisions in state owned firms prior to their being privatised; and lower barriers to entry or otherwise widen the product or geographic dimensions of markets. Many of these approaches require competition agencies to urge changes in government policies affecting competition.

4.1 Merger Review

Bearing in mind possible efficiency and failing firm considerations, merger review can and should be used to prevent the creation of market structures favouring all forms of co-ordinated interaction. This is solidly based on the difficulties agencies experience in successfully prosecuting various forms of collusion, and the even greater problems they might experience if they tried to prohibit non-collusive responses to recognised interdependence. Fortunately, most if not all OECD Members appear to share this view. For example, the U.S. Merger Guidelines are careful to note that:

> A merger may diminish competition by enabling the firms selling in the relevant market more likely, more successfully, or more completely to engage in co-ordinated interaction that harms consumers….This behaviour includes tacit or express collusion, *and may or may not be lawful in and of itself*.[52]

The same point is also evident in the European Commission's opposition to various mergers such as the *Nestlé/Perrier* and *Kali & Salz* cases (see Annex II). The latter case is particularly significant because it afforded the European Court of Justice an opportunity to affirm that the European Union's Merger Regulation extends to preventing mergers which would create or strengthen a collective dominant position.[53] The merger guidelines of at least three other countries accord as well with the view that merger review should be used to control the emergence of industry structures favouring any form of co-ordinated interaction, not just explicit collusion.[54]

Merger review can be used not just to prevent structural changes adverse to competition, but also to reduce the probability of anti-competitive behaviour post-merger. For example, with an eye to lowering the probability of co-ordinated interaction, merging parties could be compelled to: withdraw from an industry association; cease making advance, non-binding price announcements; delete meeting competition or most favoured nation clauses from their sales contracts; forbear using delivered pricing, etc. Many jurisdictions agree to accept various mergers on the basis of the parties' consenting to such conditions. Unfortunately, this approach usually involves the competition agency in continued monitoring of firm behaviour, and where undertakings are not honoured, in very difficult enforcement issues. That is why most competition offices prefer structural rather than behavioural solutions to competition problems posed by mergers.

4.2 Reducing the Incidence of Practices Facilitating Co-ordinated Interaction

The list of transparency and commitment enhancing practices discussed in the preceding section was not intended to be exhaustive. Competition agencies should be alert for new ways leading firms might use to accomplish the same goals. They should be cautious, however, about trying to stamp out such practices. This is because many if not all of the practices could have innocent, even pro-competitive impacts. For example:

1. the exchange of credit records among competing suppliers is a good example of direct information exchange, but in most cases it is more likely to encourage than to discourage competition;

2. standardised accounting should improve corporate governance, enhance the use of take-overs as a means of disciplining management inefficiency, and generally improve capital market efficiency;

3. product and packaging standardisation could lower barriers to entry and reduce both manufacturing and environmental protection costs;[55]

4. co-operation on research and development could reduce costs of duplication (though at the possible cost of a slower rate of innovation) and permit smaller firms to more efficiently spread fixed costs;

5. vertical integration can reduce co-ordination and transactions costs, eliminate double marginalisation; permit efficient price discrimination; and prevent inefficient substitution; and

6. minimum resale price maintenance could be a more efficient means of ensuring dealer supplied services than would exclusive territories.

Other things equal, the competitive threat posed by transparency and commitment enhancing practices will be greater: the larger the variety of practices used; the higher the combined market share of firms employing them and the greater the coincidence in terms of when they were adopted; and the lower the plausibility of efficiency rationales offered to defend them.

Transparency and commitment enhancing practices should receive special attention in the course of devising remedies in explicit collusion cases. In exceptional instances where they have a clear and direct anti-competitive effect, they could even be the subject of an explicit collusion case. They could also be addressed as possible abuses of dominant position, especially in countries where dominance is defined to include collective as well as single firm dominance. Far from last in importance, in regulated sectors and government procurement markets, competition agencies should advocate changes in policies which facilitate co-ordinated interaction.

4.3 Dividing State Owned Vertically Integrated Firms Prior to Privatisation

In their role as competition advocates, competition agencies should seek to ensure that the benefits expected from privatisation and regulatory reform are realised and passed on to consumers. The key, as a number of experiences have amply shown, is to ensure that markets are sufficiently competitive.[56] In many cases, especially in markets where natural monopoly network infrastructures play an important role, such competition will not properly develop unless large vertically integrated, publicly owned or regulated incumbents are properly broken up both vertically and horizontally.

The issue of appropriate vertical splits in a firm containing a natural monopoly component lies beyond the scope of this paper.[57] As for advisable horizontal divisions, one of the key concerns ought to be to reduce the probability of co-ordinated interaction. This will usually require more than creating just two or three competitors, especially if they are protected for some time against further entry.[58] Competition agencies, with their understanding of both unilateral and co-ordinated effects gained through merger enforcement work, are in a position to offer vital advice concerning the wisdom of both vertical and horizontal separations prior to privatisation.

4.4 Lowering Barriers to Entry and Otherwise Widening Both Product and Geographic Markets

One of the most obvious barriers to entry in many markets are government restrictions on international trade and investment. In some merger cases, competition agencies might be able to directly reduce such barriers by conditioning acceptance of the transactions on the parties obtaining a reduction in tariffs, anti-dumping duties or other trade restrictions. It practically goes without saying that competition agencies should also always be on guard against international cartels. Such arrangements can more than undo the benefits of trade liberalisation.

International differences in product and service standards as well as regulations covering who can provide various goods and services are commonplace. In reaction to this, especially in markets where there is only a small number of competing domestic firms, competition agencies should promote the adoption of internationally harmonised standards and/or an expanded use of mutual recognition agreements.[59]

5. Principal Messages/Conclusions

This paper has briefly touched on various ways leading firms in oligopolies could harness their interdependence in order to jointly increase profits. It also noted that these methods are roughly similar in terms of their economic effects and the factors tending to encourage or discourage such co-operation. Moreover, the paper has recognised and, hopefully, increased appreciation of the fact that leading firms face significant problems in seeking to substitute co-ordinated interaction for competition. In particular, they must not only work out the terms of their co-ordinated interaction, but also find ways of deterring cheating.

Section III of the paper identified and assessed thirteen factors affecting leading firms' incentives and abilities to engage in co-ordinated interaction and to cheat on each other, and bearing as well on their ability to detect and deter cheating. In some markets, concentration and barriers to entry are so low that co-ordinated interaction is patently infeasible or unprofitable. Aside from such markets, the probability of such interaction cannot be assessed without examining a large number, perhaps all, of the thirteen factors and considering their total effect on incentives and abilities to co-ordinate. Each case will differ in terms of how these factors should be woven together to make a total assessment of the probability of co-ordinated interaction in a particular market.

In addition to rigorous enforcement against explicit collusion (which was assumed rather than explored in the paper), there are several ways in which competition agencies could seek to reduce the incidence and severity of co-ordinated interaction. Two of those, regulation or compulsory division of leading firms, have certain serious drawbacks. That left four others which are all more preventive than curative in nature. Merger review is the most direct and probably effective preventive measure that competition agencies can apply to reduce the probability of co-ordinated interaction. Unfortunately, this tool can generally be employed only to protect existing levels of competition rather than to improve on them. Although that qualification does not generally apply to measures to discourage anti-competitive transparency and commitment enhancing practices, such measures are handicapped in two other ways. First, many such practices have both pro-competitive and anti-competitive potential, so blanket prohibitions would be quite inappropriate. Second, some competition offices may lack the legal means to eradicate these practices especially when they cannot be shown to have direct anti-competitive effects (as opposed to merely increasing the probability of co-ordinated interaction). As for dividing firms prior to privatisation, and lowering barriers to entry or otherwise widening both product and geographic markets, such measures will usually require competition advocacy rather than enforcement action. The same point applies as well with regard to eliminating any facilitating practices ultimately anchored in governmental regulation. There is great promise, however, in competition advocacy especially in countries where regulatory reform is underway.

Competition offices have much to gain from sharing their experience in preserving or enhancing competition in oligopolistic markets. To begin with, they would benefit from knowing whether roughly the same set of firms active in their market have been investigated or prosecuted elsewhere for explicit collusion, or for certain abuses of dominance. It would also be pertinent to know whether certain market behaviours are observed in markets where cost and demand conditions are quite different. If so, and especially if such behaviours do not appear to be in the individual self-interests of the leading firms, competition agencies would have better grounds for suspecting that the practices are being used to support co-ordinated interaction. International co-operation is also clearly required and advisable in enforcement action against international cartels. This is clearly recognised and encouraged in the OECD's Recommendation on Hard-Core Cartels.[60]

NOTES

1. Practically by definition, co-operation would not be feasible under perfect competition and is obviously unnecessary in monopoly. Under conditions of monopolistic competition, the probability of co-operation should be low because, as in more competitive structures, suppliers have little sense of being interdependent and are probably too numerous to be able to co-operate easily.

   Price fixing within self-governing professional services might be seen as an exception to the generalisation that co-operation is unlikely outside of oligopoly markets. Certainly the self-governing professions have illustrated their power to raise prices through restricting entry, imposing other constraints on normal business practices, and publishing "suggested" price lists. However, given the number of professionals normally involved, it is unlikely that these self-governing bodies would have such power absent a statutory mandate to protect the public, which unfortunately can be misused to protect the professionals.

2. Viscusi et al. (1995, 97)

3. Kantzenbach and Kruse (1987, 10) offer a more technical definition asserting that an oligopoly exists, "... if the variation of a behavioural parameter by one of a group of competing firms leads to a perceptible change in selling conditions for the other competing firms…, thus causing them...to respond by changing their own market behaviour." This definition was cited in Kantzenbach et al. (1995, 8).

4. Chamberlin (1933, n.14 at 48), as cited in Scherer and Ross (1990, 205)

5. Kovacic (1993, 8) agrees:

   > ... firms may be able to co-ordinate their behaviour by doing little more than observing and anticipating the price moves of their rivals. In some industry environments, these efforts at co-ordination may yield competitive effects (including supracompetitive pricing) that mimic those of an express cartel agreement.

   See also Scherer and Ross (1990, 226).

6. The United States 1992 Horizontal Merger Guidelines state:

   > Terms of co-ordination need not perfectly achieve the monopoly outcome in order to be harmful to consumers. Instead, the terms of co-ordination 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 economic harm.

   United States (1997, section 2.11).

7. United States (1997, section 2.1)

8. Robert D. Willig, "Merger Analysis, Industrial Organisation Theory, and Merger Guidelines", Brookings papers: Microeconomics 1991, pp. 281-312 at 292-293.

9. See Jerry Hauseman (1996). See also Scherer and Ross (1990, 251-260) for detailed examples of price leadership in the following U.S. industries: cigarettes; steel; automobiles; ready-to-eat cereals; turbogenerators; and gasoline.

10. It could even be argued that firms prefer less risky, more flexible alternatives to explicit collusion. This is one possible interpretation of findings published by Fraas and Greer (1977). As referred to in New Zealand (1999):

> …from an analysis of 606 cases of illegal price fixing in the U.S., [Fraas and Greer] found that the highest frequencies of cartel activity occur in markets with approximately four to 10 firms. Below four firms, cartel activity is relatively low because tacit collusion or single firm dominance is controlling.

11. Yao and DeSanti (1993, 117) cite Judge Breyer's explanation for why conscious parallelism and price leadership are generally not prohibited: "That is not because such pricing is desirable (it is not), but because it is close to impossible to devise a judicially enforceable remedy for "interdependent" pricing. How does one order a firm to set its prices *without regard* to the likely reactions of competitors?" The same point has seemingly been appreciated in other jurisdictions. Whish (1993, 281), referring to the European Court of Justice's 1979 decision in *Hoffmann-La Roche v. Commission*, stated:

> This apparent rejection of Article 86 [which prohibits abuse by a group of enterprises as well as a single entity] as a tool for controlling oligopolistic behaviour had much to commend it. Oligopolists who collude are caught by Article 85 anyway. Where oligopolists behave in an identical fashion because of the structure of the market on which they operate, they should not be condemned for abusing their position if the conduct is rational -- even inevitable -- non-collusive behaviour.

12. Viscusi et al. (1995, 131-132) believe that Williamson (1975, 246) speaks for most economists in expressing the view that co-ordinated interaction falling short of explicit collusion will rarely succeed and consequently that: "Except…in highly concentrated industries producing homogeneous products, with nontrivial barriers to entry, and at a mature stage of development, oligopolistic interdependence is unlikely to pose antitrust issues for which dissolution is an appropriate remedy."

13. For a good review of what game theory and new industrial economics learning has contributed to understanding the factors affecting co-ordinated interaction, see Kantzenbach et al. (1995).

14. A study on merger appraisal in oligopolistic markets commissioned for the United Kingdom's Office of Fair Trading stated: "…the conditions for a successful co-ordinated post-merger price rise are similar to the conditions required for a successful cartel, irrespective of whether the feared post-merger collusion is explicit or tacit." NERA (1998, 7)

15. United States (1997, section 2.1), emphasis added. See also Australia (1996, 42) where it is noted that as the number of firms is reduced there is increased scope for co-ordinated conduct "including both overt and tacit collusion" because: "It becomes easier to reach agreement on the terms of co-ordination, to signal intentions to other market participants and to monitor behaviour."

16. Collusion was defined as "…activities by firms in restraint of competition with the aim of attaining collective advantages, regardless of whether such activities are based on any express agreement reached between those firms." Kantzenbach et al. (1995, 10)

17. Kantzenbach et al. (1995, 72-73)

18. This is also clearly stated in Kantzenbach et al. (1995, 6): "Not until all levels and factors are viewed in combination can an adequate picture be obtained of the likelihood of collusion in the specific market under examination."

19. This point is reinforced if firms engaging in explicit collusion prefer bilateral meetings in order to make it more difficult to prove that they actually colluded.

20. For further discussion of the importance of the number of leading firms and of their total market share, see: Stigler (1964); Scherer and Ross (1990, 277-278); and NERA (1998,7).

21. The HHI is a weighted average of all market participants' market shares using market share as the weighting factor.

22. This shows up in a comparison of the U.S. Merger Guidelines with its predecessors. James (1993, 449) pointed out that in addition to abandoning a mechanical application of concentration data, the 1992 Guidelines:

> ...establish a clear linkage between concentration and the analysis of competitive effects....[C]oncentration no longer serves as a proxy against which other evidence is tested; instead, concentration is a single, but important, component of an integrated analytical framework that seeks to determine the extent to which are merger likely will affect competition in the relevant market.

James later (at 452) added:

> The competitive effects analysis under the 1992 Guidelines contemplate a detailed evaluation of firm incentives in light of concentration and other market characteristics. In the analysis of potential co-ordinated effects, for example, it is inappropriate to assert that concentration makes anti-competitive effects likely, and then proceed to assess whether other market characteristics make such effects more or less likely, or more or less powerful. Rather, proper Guidelines analysis considers how concentration and other factors, in combination, likely would affect whether, following the merger, firms could reach terms of understanding, detect deviations from those terms, and punish cheaters. To conduct the analysis in any other way would be to make concentration conclusive as to the likelihood of anti-competitive effect and improperly compress merger analysis, once concentration has been measured, into a single-stage test.

This does not mean, as Yao and Arquit (1992, 17-18) take pains to point out, that concentration no longer plays an important role in assessing the probability of co-ordinated interaction. Some authors believe that the trend to a more analytical and less structural approach has not yet gone far enough in the U.S. - see Werden and Froeb (1996, 67-68).

23. For examples of safe-harbours based on concentration indexes, see: Canada (1991, 21); Australia (1996, 42-43); and United States (1997, section 1.51).

24. This is another good reason that competition agencies should co-operate in exchanging non-confidential information relating to past and current enforcement work.

25. This point was alluded to by the European Court of Justice in downplaying the Commission's evidence of past behaviour in the *Kali & Salz* case - see Venit (1998, 1132). That important case is extensively referred to in both Annexes to this paper.

26. United States (1997, section 2.1). See also Australia (1996, 54-55)

27. See Kantzenbach et al. (1995, 15-16).

28. See United States (1997, section 2.11) and Australia (1996, 55).

29. NERA (1998, 57) For similar views, see Scherer and Ross (1990, 222), Yao and Arquit (1992, 18), and Ginsberg (1993). Yao and Arquit also noted that product homogeneity would enhance the ability of firms to detect and punish cheating.

30. See Scherer and Ross (1990, 239-244)

31. Venit (1998, 1128) commented:

> High price elasticity in an individual firms' demand function means that even a small price concession will be sufficient to enable the firm to market substantially more of its output. Particularly when capacity is under-utilised, this provides a strong incentive to cheat. In *Pilkington-Techint/SIV*, the Commission relied on this factor and found collusion unlikely given the high price elasticity in the companies' price-demand functions.

32. See Scherer and Ross (1990, 236). Apparently this book was "half the size of a Manhattan telephone book".

33. In the United States Merger Guidelines we read: "…reaching terms of co-ordination may be facilitated by product or firm homogeneity and by existing practices among firms…such as standardisation of pricing or product variables on which firms could compete." United States (1997, section 2.11)

34. See Kantzenbach et al. (1995, 47-49)

35. See Scherer and Ross (1990, 238-239).

36. Differences in vertical integration are mentioned in the Australian and German merger guidelines - see Australia (1996, 55) and Germany (1989, 26).

37. See Kantzenbach et al. (1995, 60).

38. This is part of a wider point well expressed by Kantzenbach et al. (1995, 74):

> The greater the value placed on potential future earnings, the more attractive a company will find collusive behaviour intended to improve and stabilise long-turn profitability. Meanwhile, the incentives for a firm to improve its own profits in the short term by cheating will be correspondingly lower. This is why estimating firms' planning horizons is of great significance when making a judgement of the likelihood of collusion.

39. United States (1997, section 2.12). The Australian merger guidelines also consider whether a competitor removed by a merger is one which "...has played a significant role in maintaining a competitive market, e.g. by undermining attempts to co-ordinate market conduct." Australia (1996, 43, see also para. 5.132 on page 50).

40. Germany (1989, 26-27). The Australian Merger Guidelines are equally nuanced in stating:

> More even market shares may increase the commonality of interest between market participants in some circumstances. In other situations, the creation of one firm with a large market share may increase the likelihood of price leadership.

The point about price leadership should be taken with a grain of salt given that market share asymmetries did not figure in a list of five factors apparently suggested by Markham as likely to increase the probability of collusive price leadership. See Scherer and Ross (1990, 249).

41. According to Scherer and Ross (1990, 290), "…the probability of pricing discipline breakdowns increases with the burden of fixed costs borne by sellers, ceteris paribus, but…recognition of this danger may stimulate institutional adaptations nullifying the tendency."

42. The minimal level is determined by where a leading firm begins in relation to the minimal point of its marginal cost curve (i.e. will marginal costs rise or fall if output is expanded), and how steeply "U" shaped its marginal cost curve happens to be.

43. According to the Canadian Merger Guidelines:

> Transparency... connotes information that is readily available in the market about competitors': prices, levels of service, innovation initiatives, product quality, product variety, levels of advertising, etc. In general, as the level of transparency in a market decreases, co-ordinated behaviour becomes increasingly difficult, because firms find it harder to detect and retaliate against secret discounts and other deviations from interdependent situations.

Canada (1991, 40).

44. OECD (1998c, p. 10, para. 45)

45. The background note to OECD (1998b) has a discussion of these and other aspects of the intellectual property/competition policy interface.

46. See OECD (1998b), in particular the Background Note by Willard Tom.

47. See also Scherer and Ross (1990, 280-281 and 285-286) and Germany (1989, 18)

48. Carlton and Perloff (1990, 227) make and qualify this point:

> Random fluctuations in demand or supply costs could make cheating hard to detect. It is possible, however, for cartels to modify their punishment methods to prevent cheating even when random shocks occur.

This was bolstered with a reference to Green and Porter (1984).

49. For analysis of the importance of large and infrequent orders in the context of assessing the probability that a merger will facilitate co-ordinated interaction, see United States (1997, section 2.12), Australia (1996, 55) and Germany (1989, 29). In a more general context, Scherer and Ross (1990, 306) also mention the importance of "lumpiness and infrequency of orders". See also OECD (1998c, page 9, paras. 34-36) where reducing the number of procurement opportunities was listed as a means of enhancing competition in procurement markets.

50. See Yao and Desanti (1993, 128) where the following excerpt from a Department of Justice competitive impact statement is cited:

> Increased prices desired by some airlines are exchanged for increases desired by others in different markets. Often such trades involve hubs. Each airline tends to prefer higher fares on routes to or from its hub cities, where it tends to have high market shares and generate the highest profits. Thus, an airline may be willing to raise fares above its most preferred fare on others' hub routes in order to ensure that those airlines charge the higher fares it desires on its own hub routes.

51. NERA (1998,33) expressed this as:

> The complexity of co-ordinated effects suggests that it is insufficient to adopt a simple checklist or point-scoring approach and careful analysis of each of the factors affecting the likelihood of collusion is required. Each of the factors will differ in importance from case to case and in some cases some of the individual factors may be amenable to quantitative analysis (e.g. the measurement of aggregate demand variability). Moreover, in some cases, even if several of the conditions for collusion are met, co-ordination may still not be possible if just one of the structural or behavioural characteristics of the market is capable of destabilising co-ordinated behaviour.

In the context of summarising the impact of "competition conditions" (as contrasted with the more briefly considered "competitive process") on "oligopolistic market domination", the German "Checklist for Merger Control Procedures" state:

> Even if an analysis of the relevant conditions of competition suggests that not all of them point to oligopolistic market domination, it may nevertheless be likely, subject to an examination of the competitive process. In this analysis, all the competitive conditions speaking in favour of that assumption must be compared with those speaking against it. In doing so, the possibilities of conscious parallelism and the likelihood that such conduct will actually occur after the merger have to be assessed in relation to each other. Special attention should be paid to the significant criteria [of] market share and barriers to entry, for these are a necessary condition of parallel behaviour. The

greater the likelihood of parallel behaviour appears on the basis of those criteria, the more evidence is needed to refute that expectation. Interlocks and the market phase are also important criteria.

Germany (1989, 30)

52. United States (1997, section 2.1, emphasis added). See also section 0.1 of those Merger Guidelines for a similar point. Moreover, after citing Rule and Meyer (1990), Winckler and Hansen (1993, 793) concluded that: "... the goal of US merger policy is to prevent the evolution of market concentration likely to lead to anti-competitive conduct that is not reachable under the behavioural strictures of the Sherman Act." (793)

53. One recent critique of EU competition law on anti-competitive agreements, included in its conclusions: "...more emphasis could be placed on measures to make collusion less likely in advance. Merger control may play an important role in this respect, as it is by and large the only instrument that can be used to affect industry structure directly. Particular attention could be given in merger analysis to the risk of establishing industry environments conducive to co-ordination." Neven et al. (1998, 78)

54. See Australia (1996, 41-44); Canada (1991, 3-4); and Germany (1989, 23)

55. Standardisation can also be anti-competitive as when it allows one or a small set of firms to control new entry. This could happen, for example, where standardisation requires access to one or more firms' intellectual property rights.

56 . Based primarily on British and American experience, Newbery (1997, 1) argued that "…introducing competition into previously monopolised and regulated network utilities is the key to achieving the full benefits of privatisation." See also OECD (1992), and Australia (1993).

57. For a discussion of the issues and trade-offs involved, see "Promoting Competition in Sectors with a Non-competitive Component", Secretariat's background paper for the May 3, 1999 meeting of Working Party 2 of the OECD's Competition Law and Policy Committee.

58. The United Kingdom's electricity sector offers informative lessons in this regard. The Government opted to create two thermal generating companies and a third, state-owned nuclear generating enterprise despite apparent risks of co-ordinated interaction. A warning concerning these risks was apparently issued before the privatisation was made – see C. Robinson, "Competition in Electricity?" (1988) cited in Australia (1993, 224, see also 222-225 for further comment regarding the separation of competitive businesses from natural monopoly networks). After surveying the post-privatisation performance of the sector, Green and Newbery (1997, 45) concluded that it would have been better to have had five instead of two conventional generating companies. The number "five" also seems to have support in game theory literature. See Phlips (1995, chapter 2).

59. See OECD (1997) Vol. II, Chapter 5 (International Market Openness and Regulatory Reform)

60. See OECD (1998a) Based on U.S. experience, enforcement against international cartels appears to be something of a growth industry. In the two years ended in September 1998, fines related to international cartels accounted for some $440 million. This was "…virtually identical to the total amount of criminal fines imposed in all the Division's criminal prosecutions during the 20 years from 1976 through 1995." Melamed (1998, 3)

Annex I.

CO-ORDINATED INTERACTION AND COLLECTIVE DOMINANCE

Some OECD Members employ a substantial lessening of competition (SLC), or close variant, screen in deciding whether to prohibit mergers. As already pointed out, competition offices applying an SLC standard are able to block mergers which substantially increase the probability of either unilateral or co-ordinated effects. Many other countries use a create or strengthen a dominant position standard (dominance standard). Interpreted as single firm dominance, this standard would certainly allow competition offices to block mergers expected to be associated with anti-competitive unilateral effects, but may leave them relatively powerless to take action against mergers whose anti-competitive impact runs through co-ordinated interaction.[1]

One way to overcome the strictures of a dominance standard would be to measure dominance in a way taking full account of industry structure instead of overly relying on a single dominant firm's market share. Another more reliable way to achieve the same result would be to expand the concept of dominance to include collective dominance. The greatest difficulty with applying this approach is to determine what "links" must exist among the collectivity, and in particular whether a high degree of recognised interdependence would suffice for a group of firms to be treated as collectively dominant.

In the context of European Union merger review, discussion of collective dominance usually begins with considering the Commission's 1989 decision in *Italian Flat Glass*. According to Monti (1996, 90): "The Commission had fined three Italian glass manufacturers for having agreed to charge identical prices, to apply a sales quota system, and to grant identical rebates." The three accounted for about 80 percent of the Italian market. In addition to accusing them under Article 85, the Commission argued that the firms had violated Article 86. The Court of First Instance noted that the Commission:

> …applied the concept of collective dominant position to the undertakings in question because, not only did they hold collectively a very large share of the market, they presented themselves on the market as a single entity and not as individuals. That emerges not from the structure of the oligopoly but from the agreements and [concerted practices] which led the three producers to create structural links among themselves, such as, in particular, the systematic exchange of products. [cited in Monti (1996, 91]

Italian Flat Glass thus extended collective dominance beyond a group of firms under common control, to catch situations where a group of firms with a large collective share of the market, somehow "presented themselves on the market as a single entity…." According to Winckler and Hansen (1993, 802):

> The Court in *Italian Flat Glass* ... stopped well short of recognising that conscious parallelism alone could give rise to a collective dominant position. Additional *behavioural* factors -- strong proven economic and legal links -- would also have to be shown. While the Court recognised that dominance may involve multi-firm situations, it set out a very restrictive test, almost requiring that the links between the entities concerned be so important that the dominant position, as traditionally defined, is exerted together by the companies. It is not even clear whether the test requires a finding of oligopolistic structure. (802)

In the 1992 Nestlé/Perrier decision, the Commission's first attempt to employ collective dominance in the merger review context, the Commission seemed to move away from focusing on behavioural or structural links between the parties in favour of looking at market wide characteristics

which would make co-ordinated interaction easier post-merger. Briones Alonso (1993, 122) summed up the Commission's approach as follows:

> In a nutshell, high levels of concentration lead the Commission to examine a long list of factors to establish whether the market is prone to the development of tacit collusion or, as it is also called in the decision, 'anti-competitive parallel behaviour'. Most factors cited in the economic literature have been considered. Some, such as the pattern of orders or sensitivity of the industry to capacity utilisation, are not explicitly developed in the decision.

The factors which, according to Briones Alonso, were applied by the Commission closely resembled those dealt with in Section III of this paper, and those in turn have featured, explicitly or implicitly in merger guidelines adopted by countries using a substantial lessening of competition test. They essentially concern features of an oligopoly which create an incentive and ability to substitute co-ordination for competition.

Recently in its *Kali & Salz* merger decision (see Annex II for further detail), the European Court of Justice (ECJ) affirmed that the European Union's Merger Regulation does extend to collective dominance. In specific, the ECJ stated that when a merger allegedly creates or strengthens a collective dominant position and thereby significantly impedes competition,

> …the Commission is obliged to assess, using a prospective analysis of the reference market, whether the concentration…leads to a situation in which effective competition in the relevant market is significantly impeded by the undertakings involved in the concentration and one or other undertakings which together, in particular because of correlative factors which exist between them, are able to adopt a common policy on the market and act to a considerable extent independently of their competitors, their customers, and also of consumers. (at para. 221 of the judgement)

Venit (1998, 1108) pointed out that an important part of the Commission's case against this merger consisted of various links between the merged entity and its principal competitor, i.e. SCPA of France:

> According to the Commission, the following commercial links between the K&S and SCPA made it unlikely that K&S/MdK and SCPA would compete with each other following the merger:
>
> - K&S and SCPA both participated in an Austrian export cartel,Kali-Export GmbH, in which each of K&S, MdK, SCPA and Coposa (a Spanish company) held 25 percent of the shares;
>
> - K&S and EMC/SCPA each owned 50 percent of the capital of the Canadian potash producer,Potocan; and
>
> - SCPA was the distributor for K&S in France.

The ECJ commented at some length on the sufficiency of examining links between firms in order to identify and establish collective dominance. Venit (1998, 1115-1116) deduced from the judgement:

> It is far from clear that non-economic links are either necessary or sufficient to establish the existence of a serious risk of collusion….To the extent that existence or non-existence of behavioural links is irrelevant from an economic perspective, the Court has rendered the Commission an important service in liberating it from the constraints that might otherwise have been imposed by its jurisprudence in Article 86 cases.

At 1133, Venit (1998) added:

> ...the Court rejected the significance of the structural links so prominently relied on by the Commission in its *Kali & Salz* decision. In doing so it indicated that, by themselves, structural links are not *sufficient* to create a risk of oligopolistic dominance. The Court's judgement did not address the issue of whether structural links are *necessary* for a finding of oligopolistic dominance. *However, the emphasis placed by the Court on interdependence suggests that structural links are probably not even necessary* [this emphasis added]. Nevertheless, where present, structural links and mutual commitments can, in an appropriate case, be significant factors enhancing the likelihood of collusion. Such links may be particularly important because they compensate for the lack of natural transparency in market conditions. They can, however, take different forms, including repetitive contacts between the same players which tend to reduce uncertainty and enable them to gain a better understanding of each other's competitive strategies.

If Venit is correct, a collective dominance based test should be very similar to the application of a substantial lessening of competition test to prohibit mergers which significantly increase the probability of co-ordinated interaction in an oligopoly setting. This does not mean, however, that the two tests will prove equally easy to prove and apply in court.

NOTE

1. This was the view expressed by the Australian Trade Practices Commission (now the Australian Competition and Consumer Commission) during the debate leading up to the change back to a substantial lessening of competition test from a single firm dominance test. See Williams (1993, 83).

Annex II.

CASE EXAMPLES

1. Non-merger cases

After briefly surveying a number of American industries characterised by high ratios of fixed to variable costs, i.e. railroading, rayon manufacturing, cement, steel, heavy electrical equipment, plus petroleum extraction and refining, Scherer and Ross (1990, 293) summarised with:

> …some industries (like American steel until 1968 and world oil until 1984) have been quite successful in minimising rivalrous pricing despite high fixed and low variable costs and depressed demand; some have been successful only when the financial pressures on their members were not strong; and some have been unsuccessful even after engaging in collusion. The explanation for these differences appears to lie largely in the presence or absence of other conditions conducive to co-operative pricing. When other factors such as the size distribution of firms, the degree of product homogeneity, the extent of acceptance accorded the price leader, the ability and willingness of producers to carry sizeable inventories, and deftness in avoiding antitrust action are favourable, pricing discipline may be maintained despite substantial fixed costs. When they are unfavourable, a heavy fixed cost burden makes independent pricing during business downturns all the more probable. The net balance among these tendencies can only be ascertained through statistical analysis....there is evidence that high capital intensity leads on average to lower profit returns, presumably reflecting more fragile pricing discipline. However, the profit-depressing effect of capital intensity is mitigated to some extent when market concentration is particularly high.

From the perspective of cases brought by the European Commission, Neven et al. (1998, 73-74) made similar points:

> In a number of recent cases there are reasons to think that industry characteristics made the collective exercise of market power particularly attractive and that explicit co-ordination was also likely to be necessary. Indeed, there are striking similarities between a number of the recent cases in terms of industry characteristics. Cases like *Polypropylene, Flat Glass, PVC, LEDP, Wood Pulp, Welded Steel* and to a lesser extent *Soda Ash* are concerned with industries where there is excess capacity for a substantial period of time, where fixed costs are large and where marginal cost rises quickly as capacity utilisation is reduced. In terms of demand, the aggregate demand elasticity is relatively low but the products are either homogeneous (like wood pulp, welded steel or soda ash) or differentiated but highly standardised and sold by several firms (flat glass), so that in all cases, the elasticity of demand at the firm level can be expected to be quite high. In some industries (like wood pulp or the automotive segment in flat glass), the concentration of buyers may also contribute to such high elasticities.
>
> These characteristics will affect the prospects for the exercise of market power in the following respects: first, the high degree of market transparency, which follows from the standardisation of products and the concentration of buyers and sellers, will improve the detection of potential deviations. The probability that some exercise of market power can be established is thus enhanced. Second, when there is excess capacity, there is little threat of entry. Third, the incentive to seek some market power is very high in those industries, in particular after a negative

> demand shock (which affects profit significantly given the rigidity of the production structure....Given that aggregate demand is inelastic, relatively large increases in prices can be achieved without much reduction in aggregate output. Note, however, that the incentive to cheat on the 'agreement' will also be strong because of the shape of the cost function. In other words, both the rewards from reducing output, and the incentive to deviate from the collusive outcome, will be exacerbated by the characteristics of the industry. Circumstances are, therefore, such that one might expect on theoretical grounds a large number of attempts to co-ordinate, and a fair number of failures. These are typically the circumstances under which firms resort to some form of explicit co-ordination.

2. Merger Cases

In a recent speech, a senior staff member of the United States Federal Trade Commission referred to a number of important merger cases giving special emphasis to, among other things, co-ordinated interaction. One of the mergers he referred to was the sale of DuPont's world-wide hydrogen peroxide business to Degussa. The market was concentrated (HHI of 2000 rising to 2500 post-merger), entry was difficult, and market demand quite price inelastic. Parker (1998, 8) drew attention to some other factors as well that, despite the possible attenuating influence of some large buyers, contributed to the FTC insisting on some changes to the merger before permitting it to proceed:

> First, hydrogen peroxide is a highly homogeneous product that is purchased primarily on the basis of price. That makes it easier to agree on price, and it also makes it easier to detect cheating. Second, reliable pricing information is available to the producers due to the use of delivered pricing, the practice of advance announcement of price increases, and customer arrangements including meet-or-release clauses. Thus, the firms have good information on what their competitors are doing, and what they're planning to do with respect to price.
>
> Third, there was a past history of express collusion among hydrogen peroxide producers in Europe from the early 1960s through the late 1970s. The firms involved were producers that after the acquisition would be the leading manufacturers in North America.
>
> Fourth, there are industry practices that can facilitate interdependence and co-ordination in a concentrated market. For example, producers make sales to each other with some frequency. At times those sales appeared to be intended to avoid competitive conflicts among producers.
>
> Fifth, producers have been able to maintain large differentials in pricing among different end-uses, even though the product is essentially indistinguishable in its performance characteristics. That indicates at least two things: an ability to co-ordinate prices, and the inability of arbitrage to break down pricing differentials.
>
> Finally, company documents projected higher prices as a result of the proposed acquisition. In general, that kind of evidence is consistent with both a unilateral effects and a collusion theory, but here the structural conditions indicated that collusion is the more likely outcome.

Another of the mergers Parker described concerned a market where there was significant product differentiation. This was the Exxon/Royal Dutch Shell viscosity index ("VI") improver (a motor oil additive) joint venture. The transaction would have reduced the number of merchant producers from four to three, and things were made worse by one of the producers being 100 percent vertically integrated, i.e. it sold to a captive buyer. Since Exxon and Shell together would have had more than 50 percent of the merchant sales in North America, there was a clear risk of unilateral effects but the facts also pointed to an

even greater risk of co-ordinated interaction. The product differentiation was acknowledged to decrease the risk of co-ordinated price increases, but this still left the risk of firms effectively allocating customers with the same ultimate effect on prices. In any case, Parker (1998, 9) observed:

> Several factors suggest[ed] that collusion would be successful. First, the demand for VI improvers is highly inelastic. It is needed to meet industry standards for motor oil, and there are no economic substitutes. In addition, it represents less than 10 percent of total cost of motor oil. Consequently, customers are insensitive to price, and suppliers have ample incentive to collude. Second, as one might expect when products are differentiated, there is some brand loyalty. Manufacturers of motor oil formulate and market their products based on the characteristics of a particular VI improver, and a change in formulation would require new testing and qualification to meet auto manufacturers' requirements. Thus, switching would entail significant costs and would take some time. Consequently, motor oil manufacturers would be reluctant to switch suppliers for only a small price increase.
>
> Third, the proposed joint venture would have facilitated co-ordination by increasing the homogeneity among the firms with respect to their product mix. Along with VI improvers, motor oil producers also purchase other additives, including dispersant/inhibitor packages. Prior to the formation of the joint venture, one supplier of VI improvers did not offer DI packages, and one supplier of DI packages did not sell VI improvers. After the joint venture, all three of the merchant suppliers would sell both products and would have similar interests in maximising the overall return from the full line of additives. Consequently, it would have been easier for those suppliers to co-ordinate their behaviour, as well as more difficult for customers to shop around.

From these merger cases plus another involving a joint venture combining Shell and Texaco's refining and marketing assets, Parker (1998, 9-10) drew some important lessons:

> First, the co-ordinated interaction theory is alive and well, and [the FTC] will apply it in the appropriate case. Second, there is no standard checklist of essential facts that [the FTC applies] to co-ordinated interaction cases. Some cases are more straightforward than others, but difficult cases don't get a free pass. Third, mergers resulting in a leading firm with a very large market share are not always challenged under a unilateral effects theory; [the FTC] will allege co-ordinated effects when the facts make that appropriate.
>
> Finally, the mere fact that products are differentiated, as in Exxon/Royal Dutch Shell, does not mean that a co-ordination theory will not apply. Differentiation can inhibit co-ordinated interaction to the extent that rivalry is multidimensional. Differentiation, however, inhibits co-ordination to a limited extent, for example, where there are only a small number of large firms that control the vast majority of market share. Co-ordination does not have to be perfect or complete, nor does it have to include all terms of competition. For example, in Exxon/Royal Dutch Shell the concern was that the firms could avoid the complexities of co-ordinating prices by allocating markets. Further, differentiation might make co-ordination easier in two ways. First, even in a market with a large number of competitors differentiation may lead to sets of brands within the market that compete closely with one another, but not with other brands. If there is strong consumer preference for only one or two brands, only those firms producing the close substitutes need co-ordinate. Second, where differentiation is based on strong consumer preference, entry may be particularly difficult and costly, impeding the ability of rivals to take away share through entry or repositioning.

Just as antitrust authorities in the United States examine a number of factors in order to estimate the probability of co-ordinated interaction in merger cases, so also does the European Commission. For

example, the European Commission in the *Nestlé/Perrier* case considered, according to Briones Alonso (1993, 119-121) the following factors:

(1) the high degree of supply concentration (nation-wide suppliers reduced from three to two)

(2) transparency of the market (in pricing, quantities sold, and capacity to monitor rival behaviour) - "Transparency is not only considered in the Commission's decision as a factor facilitating tacit collusion, but also as a means of 'monitoring' that collusion."

(3) cost, capacity and market share similarities between the remaining two main players plus the fact that they were both active in the wider food industry and were already co-operating in some sectors of it created a commonality of interests which the Commission saw, "…would further facilitate 'co-operative' attitudes." Further evidence of such co-operation was that the same two companies had jointly sought to prevent a third party from buying Perrier.

(4) price inelastic market demand;

(5) technological maturity – Briones Alonso commented: "A high rate of innovation and technological change tends to erode acquired market positions, increases uncertainty and creates very different expectations in each company. Tacit collusion is attained with less difficulty when this destabilising factor is absent."

(6) a low ability of other firms in the market to constrain anti-competitive behaviour; and

(7) past evidence of failed attempts to enter the industry indicated considerable barriers to entry.

The Commission allowed the Nestlé merger to proceed but only after some asset divestiture designed to help create a new competitor, plus some behavioural constraints intended to reduce market transparency – see Winckler and Hansen (1993, 813-815).

In 1998, the European Court of Justice (ECJ) made a decision relating to the Kali & Salz ("K&S"), a potash products subsidiary of BASF, acquisition of the East German potash producer, Mitteldeutsche Kali AG ("MdK") (the "Kali & Salz" case). This merger took place in a highly concentrated, transparent and mature (i.e. low level of technological progress) market. According to Venit (1998, 1134):

> The Court's determination that the Merger Regulation applies to oligopolistic dominance, its acceptance that the test for the latter under the Merger Regulation is not bound by the Court's jurisprudence under Article 86, and its emphasis on the need for a careful and dynamic case-by-case economic assessment, rather than reliance on a mechanical checklist of descriptive criteria, represent a recognition of the complexities posed by the need for rigorous economic analysis in merger cases. In effect, the Court's judgement has affirmed the broad scope of the Merger Regulation while at the same time holding the Commission to a more rigorous standard of proof than it employed in its *Kali & Salz* decision. As such, the judgement should give further positive impetus development of economic analysis in merger cases.

The reader is referred to Annex I for further discussion of the *Kali & Salz* case.

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NOTE DE RÉFÉRENCE

1. Introduction

Lorsque les entreprises savent qu'elles se trouvent dans une situation de forte interdépendance, comment les responsables de la concurrence peuvent-ils faire en sorte qu'elles se livrent concurrence au lieu de trouver des moyens de coopérer ? Tel est fondamentalement le « problème de l'oligopole » auquel se trouvent confrontés les services de la concurrence partout dans le monde, en particulier sur les marchés où la collusion est particulièrement rentable et facile. De toute évidence, la solution consiste en partie à engager des poursuites judiciaires et à sanctionner lourdement toute collusion explicite. Malheureusement, plus ces poursuites et ces sanctions sont efficaces, plus les entreprises recherchant une collusion ont tendance à recourir à d'autres moyens de coopération qui ne fournissent pas les types de preuves dont le ministère public a besoin pour gagner un procès pour entente. Dans une certaine mesure, il est possible de s'attaquer à ce type de comportement avec une définition élargie de ce qui constitue une entente. Toutefois, cette approche atteint vite ses limites au-delà desquelles il devient vain d'essayer d'amener les entreprises à ne pas tenir compte de leur interdépendance et à s'interdire d'agir rationnellement pour rechercher le profit maximum.

Une meilleure manière d'aborder le problème des oligopoles serait de compléter une réglementation rigoureuse contre la collusion explicite par des mesures axées davantage sur la prévention que sur la répression. Dans certains cas, il faudrait que la politique de la concurrence vise à modifier les caractéristiques ou facteurs structurels, informationnels et comportementaux déterminant les incitations et les aptitudes des grandes entreprises à remplacer la concurrence par la coopération. Le but premier du présent document est d'identifier et d'évaluer ces facteurs. Son second but est d'appliquer ce qu'on sait de ces facteurs pour aider les services de la concurrence à réduire l'incidence et la gravité des actions de coopération anticoncurrentielle. Le reste de cette section sera consacré à une analyse succincte des diverses méthodes de coopération et à la présentation d'autres manières de résoudre le problème des oligopoles.

Le présent document fera amplement référence au contrôle des fusions, parce que c'est dans ce contexte que les services de la concurrence ont été le plus directement confrontés à la nécessité d'analyser la probabilité d'une coopération anticoncurrentielle. Toutefois, ce document ne constitue pas une analyse exhaustive du contrôle des fusions. En particulier, il faut préciser que les fusions ne devraient pas être automatiquement interdites simplement parce qu'elles augmentent le risque d'une coopération anticoncurrentielle. La décision d'interdire une fusion ne peut être prise sans prendre en compte son impact sur le pouvoir unilatéral de nuire à la concurrence ainsi que diverses efficiences propres à la fusion.

1.1 Collusion explicite et autres formes d'interaction coordonnée

La forme la plus directe, la plus nuisible et la plus sévèrement sanctionnée de coopération anticoncurrentielle est la collusion explicite, c'est-à-dire lorsque des concurrents communiquent entre eux pour parvenir à une entente explicite visant à réduire la concurrence. La collusion explicite va au-delà des accords visant à faire monter les prix en réduisant la production. Il en existe au moins deux autres formes. Kantzenbach et al. (1995, 13) parlent, à cet égard, de collusion concernant la capacité et de collusion concernant le marché. Par collusion concernant la capacité, ils entendent " … une limitation collective de

la capacité de production sur un marché donné, soit par la fermeture d'une capacité existante, soit par la suppression d'une extension de capacité qui serait efficace dans des conditions concurrentielles". Par collusion concernant le marché, ils désignent :

> " … les accords ou les ententes tacites qui divisent les marchés, soit par type de produit, soit par région. Le comportement de fournisseurs relève de la collusion si chacun choisit de se spécialiser dans certains segments du marché, et si chacun reconnaît réciproquement la spécialisation choisie par les autres".

Toutes les structures de marché ne se prêtent pas de façon égale à une collusion explicite. En l'absence de toute forme de réglementation, cette collusion est improbable à moins qu'un petit nombre d'entreprises représentent chacune une part importante du marché, c'est-à-dire sauf en cas d'oligopole[1]. Une définition type de l'oligopole est : "une structure de marché comportant un petit nombre de vendeurs - suffisamment petit pour que chacun des vendeurs soit obligé de tenir compte des actions de ses rivaux et de leurs réactions futures probables à ses propres actions"[2]. La reconnaissance de l'interdépendance est la marque de l'oligopole[3]. Dans le présent document, nous adoptons une définition élargie du terme oligopole, en y incluant les marchés sur lesquels il y a un petit groupe d' "entreprises dominantes" plus un très grand nombre de plus petites entreprises formant une frange concurrentielle. Les entreprises dominantes constituent le sous-ensemble de fournisseurs dont le comportement concurrentiel dépend principalement de ce qu'ils pensent que leurs concurrents feront en réaction à leurs propres décisions.

En termes d'effet économique, la collusion explicite n'est pas nécessairement très différente des autres formes de coopération entre entreprises dominantes. D'après Chamberlin :

> Si chacun des concurrents recherche son profit maximum de façon rationnelle et intelligente, il se rend compte que quand il n'y a que deux vendeurs ou en tout cas un petit nombre de vendeurs, sa propre action a une incidence considérable sur ses concurrents, et qu'il serait vain de supposer qu'ils vont accepter sans représailles les pertes qu'il leur fait subir. Comme toute baisse pratiquée par l'un d'eux a inévitablement pour résultat de réduire ses propres profits, personne ne pratiquera de baisse, et même si les vendeurs sont apparemment indépendants, le résultat est le même que s'ils avaient conclu un accord de type monopole[4].

Winckler et Hansen (1993:789) font également observer "que lorsque certaines conditions de marché sont réunies, l'interdépendance oligopolistique peut se traduire par une fixation des prix supraconcurrentielle sans collusion formelle"[5]. Ce point a aussi été mis en évidence dans le domaine de la politique de contrôle des fusions[6].

Toute coopération anticoncurrentielle, qu'il s'agisse d'une collusion explicite ou d'autres méthodes ayant les mêmes effets, sera désignée par le terme "interaction coordonnée", et définie de la manière suivante : "action menée par un groupe d'entreprises, rentable pour chacune d'elles seulement dans la mesure où elle bénéficie de réactions conciliantes des autres"[7]. L'interaction coordonnée est le comportement responsable des « effets coordonnés », qui ont été bien définis par le Professeur Willig lors des discussions au sujet des pratiques de contrôle des fusions aux États-Unis :

> Sur le plan terminologique, il peut être utile de classer les théories des éventuels effets anticoncurrentiels des fusions en deux catégories : les effets unilatéraux et les effets coordonnés. Les effets coordonnés sont les changements de ligne d'action des entreprises parties à une fusion, qui ne seraient rentables pour elles du fait de la fusion que si ces changements s'accompagnent d'une modification des lignes d'action des entreprises non parties à la fusion, se trouvant motivée en partie par une crainte de représailles. L'exemple type d'effets coordonnés est la hausse des prix pratiquée par les entreprises qui fusionnent, adoptée également par les entreprises non parties à la

> fusion, lorsque la fusion permet une stabilisation de la collusion tacite. Dans ce cas, les hausses de prix sont rentables parce que toute déviance de la part d'une entreprise déclencherait probablement des baisses de prix en représailles[8].

Dans beaucoup de pays Membres de l'OCDE, les lois sur la concurrence font référence à l'abus de domination et/ou les dispositions relatives au contrôle des fusions visent une « domination collective ». Le comportement anticoncurrentiel d'entreprises occupant une position dominante collective est très comparable à l'interaction coordonnée. L'Annexe I donne plus de détails sur ce point, dans le contexte du contrôle des fusions.

Outre la collusion explicite, un autre exemple type d'interaction coordonnée est la fixation des prix par un leader, telle que la décrivent Scherer et Ross (1990:248) :

> …ensemble d'usages et de pratiques des entreprises d'un secteur par lesquels des changements de prix catalogue sont normalement annoncés par une entreprise généralement reconnue comme leader par les autres, qui suivent ses initiatives. De grandes variations sont possibles dans la stabilité de la position du leader, les raisons de sa position de leader, son influence sur les autres entreprises, et l'efficacité de son action pour la mise en place de prix qui maximisent les profits dans ce secteur.

On peut citer un exemple particulièrement intéressant à cet égard, parce que l'entreprise jouant le rôle pilote était elle-même soumise à une réglementation des prix ; c'est ce qui s'est passé sur le marché américain du téléphone longue distance. D'après Jerry Hauseman, au début des années 1990, AT&T a agi comme leader pour les prix pour les suiveurs MCI et Sprint. Il signale en particulier ce qui s'est passé au début de 1993, lorsqu'un changement de normes comptables a assoupli l'encadrement des prix de AT&T qui avait subi des charges supplémentaires du fait des coûts des départs en retraite. AT&T augmenta ses prix et MCI et Sprint suivirent rapidement. Dans la présentation qu'il a faite aux responsables de la réglementation des télécommunications aux États-Unis, M. Hauseman a fait remarquer que ce n'était pas ce qu'on aurait pu attendre s'il y avait eu une véritable concurrence entre les trois entreprises. Il souligna que les charges comptables en question ne représentaient pas un changement des coûts économiques (c'est-à-dire marginaux), et qu'en tout état de cause, ni MCI ni Sprint, sociétés relativement nouvelles, n'enregistraient de nombreux départs en retraite. Dans des conditions concurrentielles normales, AT&T n'aurait pas dû pouvoir augmenter ses prix puisque les coûts économiques de ses rivaux n'avaient pas augmenté[9].

Outre le pilotage des prix, il existe d'autres indices d'une interaction coordonnée : l'application très répandue de règles empiriques de fixation des prix au coût complet ou livraison comprise, le maintien des prix autour de certains pivots et la tolérance d'un grand nombre de commandes en attente ou de stocks importants au lieu de procéder à de fréquents changements de prix pour répondre aux fluctuations de la demande.

1.2 Réduction de l'incidence d'une interaction coordonnée

Même si une stricte interdiction et de lourdes sanctions sont probablement de nature à réduire l'incidence d'une collusion explicite, la multiplication des procès prouve bien que les entreprises trouvent encore rentable d'adopter ce type de pratique. Cela est peut-être dû à la faible probabilité de voir une collusion véritablement repérée et punie. Bien entendu, les entreprises veillent à ne pas fournir de preuve de ce type d'accord. Une étude plus approfondie de la réalité de l'application des dispositions à cet égard sortirait du cadre du présent document. Toutefois, il faut souligner que, même si cette application était efficace à 100 pour cent, elle ne mettrait pas nécessairement un terme à toute interaction coordonnée. Elle

pourrait conduire simplement les entreprises à adopter des solutions de rechange, moins susceptibles de donner lieu à des sanctions et présentant l'avantage d'une plus grande flexibilité et de moindres coûts[10].

Le fait qu'une interaction coordonnée n'allant pas jusqu'à un accord explicite soit apparemment légale dans de nombreux pays ne tient pas à des lacunes inexplicables des lois antitrust. S'il y a omission, c'est sans doute parce qu'il est difficile de concevoir des remèdes adaptés. Dès lors que les entreprises ont conscience de leur interdépendance, on ne peut attendre d'elles qu'elles n'en tiennent pas compte dans la détermination de leur comportement concurrentiel, ni les contraindre aisément à ne pas en tenir compte[11].

Certains services de la concurrence disposent, au moins en théorie, d'un « remède » direct contre l'interaction coordonnée. Ils sont habilités à imposer un contrôle des prix en réaction à des prix élevés considérés comme un abus de domination (qu'il s'agisse d'une domination individuelle ou collective). Comme dans le cas de toute réglementation des prix, ce type de contrôle se heurte à bien des difficultés. S'il n'existe pas de marché concurrentiel de référence, les autorités de la concurrence devront fixer les prix sur la base de certains critères de coûts et ces prix peuvent être très difficiles à estimer, surtout s'il s'agit de produits conjoints et si la technologie évolue rapidement. En tout état de cause, même si les prix peuvent être fixés à des niveaux corrects, il y aura encore bien des difficultés à surveiller les comportements effectifs de fixation de prix ainsi que les niveaux de qualité. Confrontés à ces amples difficultés, les services de la concurrence auraient intérêt à éviter de recourir à un contrôle des prix pour régler le problème des prix imposés par les oligopoles, ou tout au moins à accompagner ce type de contrôle d'autres moyens de s'attaquer aux racines du problème.

L'un de ces autres moyens est le démantèlement forcé d'entreprises dominantes. Là encore, comme dans le cas du contrôle des prix, le remède risque d'être pire que le mal. En effet, même en cas de recours occasionnel à cette mesure, les grandes entreprises risquent d'hésiter beaucoup à accroître leur part de marché par le biais d'une amélioration de leur efficacité et de la fixation de prix proches des coûts marginaux. En outre, le démantèlement forcé risque de faire perdre aux entreprises d'importantes économies d'échelle[12].

Ce qui a été dit des vertus du démantèlement forcé des entreprises souffre une exception notable. Dans de nombreux pays, par le passé, certains marchés ont été réservés à des entreprises d'État intégrées verticalement. Les télécommunications, la distribution du gaz naturel, l'eau et les réseaux d'assainissement, les chemins de fer et la production d'électricité en sont autant de bons exemples. On assiste à une prise de conscience croissante du fait que bon nombre de ces secteurs comportent des activités qui pourraient être organisées de façon concurrentielle. L'ouverture à la concurrence se trouve grandement facilitée par la privatisation des entreprises d'État. Avant la privatisation, les pouvoirs publics jouissent d'une liberté exceptionnelle pour restructurer ces entreprises de façon à stimuler la concurrence.

En procédant par élimination, et mise à part une action vigoureuse anti-ententes, il reste quatre bons moyens raisonnables de réduire l'incidence et l'intensité de l'interaction coordonnée : interdire les fusions qui augmentent sensiblement la probabilité d'une interaction coordonnée et n'offrent pas suffisamment de gains de productivité, décourager le recours à des pratiques de nature à faciliter l'interaction coordonnée, procéder à un démantèlement des entreprises d'État avant de les privatiser, et abaisser les barrières à l'entrée ou élargir autrement les dimensions des marchés géographiques et des marchés de produits. La section IV du présent document développe ces quatre moyens.

La section suivante présente une introduction générale aux facteurs influant sur la probabilité de manifestation de diverses formes d'interaction coordonnée. La section III répertorie et évalue treize de ces facteurs. Après un examen des solutions possibles à la section IV, le présent document conclut en formulant quelques remarques succinctes.

2. Conditions générales préalables à une interaction coordonnée

Outre la prise de conscience d'une interdépendance, il semble qu'il faille qu'une autre condition soit remplie pour que la probabilité soit grande de voir un comportement de coopération remplacer la concurrence sur des marchés oligopolistiques. Il faut en effet que les barrières à l'entrée et/ou à l'expansion soient suffisamment élevées pour que les entreprises dominantes aient intérêt à faire monter les prix en réduisant les quantités fournies.

Observer qu'un marché est caractérisé à la fois par une forte concentration et par des barrières élevées à l'entrée et/ou à l'expansion est loin d'être suffisant pour prédire que les entreprises dominantes vont se lancer dans une interaction coordonnée. Il faut en effet une évaluation beaucoup plus complète des incitations et des capacités à se lancer dans ce type de coopération, et c'est là que George Stigler a apporté une contribution importante.

Au lieu de supposer qu'une collusion entre entreprises dominantes est assez facile à réaliser, Stigler a remarqué que ces entreprises peuvent avoir beaucoup de mal à se mettre d'accord sur les modalités de leur coopération. En outre, si elles parvenaient par le biais d'un accord à faire monter les prix au-delà des niveaux concurrentiels, chacune d'elles serait alors incitée à tricher sur les prix. La collusion cesserait à moins que les entreprises ne soient en mesure de détecter et de punir la tricherie. En bref, la collusion n'apparaîtrait comme une véritable possibilité que dans des situations où il serait assez facile de parvenir à un accord et de le faire respecter.

Depuis, la théorie économique a évolué et a montré que la tentation de tricher risque d'être beaucoup plus faible que ce que Stigler croyait, à condition de considérer la situation de concurrence entre les entreprises interdépendantes sur une période de temps indéfinie. Toutefois, il est difficile de croire que les entreprises coordonnant leur comportement puissent être en mesure de détecter et punir de façon crédible toute tricherie. En outre, la théorie des jeux a mis en évidence l'importance toute particulière des facteurs déterminant ou reflétant la capacité des entreprises à s'engager dans un certain comportement et à faire connaître cet engagement, le degré d'hétérogénéité entre les prétendants à la collusion, et le niveau d'incertitude prévalant sur le marché[13].

Il est largement admis, surtout dans le contexte du contrôle des fusions, que les idées de Stigler valent non seulement pour une collusion explicite mais aussi pour toute interaction coordonnée en général[14]. Par exemple, dans les Directives des États-Unis de 1992 sur les fusions horizontales (U.S. Merger Guidelines), on peut lire :

> Une fusion risque de réduire la concurrence en permettant à des entreprises de s'engager plus probablement, plus complètement ou avec plus de chances de succès dans une interaction coordonnée si les conditions du marché, dans leur ensemble, permettent de se mettre d'accord sur une action concertée et de détecter et de punir toute déviance par rapport aux conditions de la concertation[15].

Ce point de vue se retrouve aussi dans une étude récente entreprise pour la Commission européenne, qui se demandait comment intégrer les principes de la « nouvelle économie industrielle » dans le contrôle des fusions. Ayant auparavant défini la collusion comme quelque chose de très proche de l'interaction coordonnée[16], sinon identique à celle-ci, l'étude indiquait plus loin que les facteurs :

> …interdisant ou encourageant la collusion devront être examinés à quatre niveaux pour qu'il soit possible d'apprécier la probabilité d'une collusion. Au premier de ces niveaux, il faut voir s'il y a dès le départ des incitations à organiser une collusion. Ensuite, il s'agit d'évaluer la stabilité d'une collusion possible, en recherchant les incitations à tricher sur ce marché particulier, la probabilité que la tricherie passe inaperçue et l'existence ou non de moyens de punir les déviances[17].

3. Facteurs influant sur la probabilité d'une interaction coordonnée

Avant d'évoquer successivement les nombreux facteurs susceptibles d'influer sur les incitations et les capacités des entreprises à se lancer dans une interaction coordonnée, il y a lieu de formuler deux remarques préliminaires importantes. Premièrement, rares sont les facteurs qui ont une action unidirectionnelle, c'est-à-dire qu'en fonction des circonstances, ils peuvent soit augmenter, soit diminuer la probabilité d'une interaction coordonnée. Généralement, c'est parce que le même facteur peut exercer une influence sur deux ou plusieurs variables d'incitation et de capacité, mais avec des effets éventuellement opposés sur la probabilité d'une action coordonnée. Deuxièmement, aucun des facteurs pris individuellement ne peut à lui seul justifier une forte probabilité d'interaction coordonnée. C'est pourquoi nous insistons sur l'expression « dans leur ensemble » dans la citation extraite des Directives américaines sur les fusions de la section précédente[18]. En revanche, deux facteurs pourraient très certainement servir à dresser des garde-fous. En particulier, si les parts de marché des entreprises dominantes ou les barrières à l'entrée et/ou à l'expansion sont suffisamment faibles, il est fort peu probable qu'une interaction coordonnée existe ou tout au moins puisse durer.

A cause des effets bidirectionnels et de l'interaction entre les facteurs, il est difficile de déterminer un ordre logique dans lequel les présenter. L'ordre choisi ci-dessous n'a pas de signification particulière, si ce n'est que les facteurs permettant de dresser des garde-fous sont cités en premier.

3.1 Nombre d'entreprises dominantes et pourcentage du marché qu'elles représentent

Toutes choses étant égales par ailleurs, moins les entreprises dominantes sont nombreuses sur un marché donné, plus il est probable qu'elles se lancent dans une forme d'interaction coordonnée. De fait, si les entreprise dominantes sont en plus grand nombre, on se trouve dans les conditions suivantes :

1. des coûts de transaction plus élevés pour se lancer dans une interaction coordonnée - le nombre de réunions ou de contacts directs susceptibles d'être nécessaires (collusion explicite)[19] et les coûts de l'observation du comportement des autres entreprises et de l'ajustement à ce comportement croissent plus vite que le nombre d'entreprises qui coopèrent ;

2. une moindre interdépendance entre les entreprises, ce qui se traduit par un moindre besoin de s'entendre, auquel s'ajoute une plus faible probabilité pour les entreprises d'être à même de distinguer entre les effets d'une tricherie et les changements de la demande sur le marché ;

3. une probabilité accrue que les entreprises aient des coûts différents ainsi que d'autres caractéristiques divergentes rendant difficile un accord sur une ligne d'action mutuellement profitable (les situations asymétriques sont étudiées plus loin) ;

4. une probabilité accrue, étroitement liée à la précédente, que l'une des entreprises dominantes soit, pour reprendre les termes de Scherer et Ross (1990:277) « … un franc-tireur, poursuivant une politique de prix indépendante et agressive »[20] (le cas des francs-tireurs est aussi examiné plus loin).

Toutes choses étant égales par ailleurs, et tant que les fournisseurs réalisent d'importantes économies d'échelle, le pourcentage du marché détenu par les entreprises dominantes est en corrélation positive avec la probabilité d'une interaction coordonnée. En effet, plus leur part de marché est petite, plus les entreprises dominantes doivent réduire leur production pour faire monter les prix d'un certain montant. Alors, plus ces réductions sont grandes, et plus les coûts unitaires sont alourdis pour les entreprises dominantes, ce qui diminue la rentabilité de l'opération. Ce problème se trouve fortement aggravé si le prix pratiqué avant l'interaction coordonnée tombe dans la tranche d'élasticité-prix de la courbe de la demande.

Nous reviendrons plus loin aux économies d'échelle afin d'examiner leur impact sur l'intensité de la concurrence par les prix et les aspects connexes, mais il est utile de préciser ici qu'il devrait généralement y avoir une relation positive entre les économies d'échelle et la part de marché détenue par les entreprises dominantes. Sous l'angle de l'accroissement de la probabilité d'une interaction coordonnée, de fortes économies d'échelle ont tendance à rendre davantage nécessaire la détention d'une forte part de marché et, de ce fait, à aider les entreprises dominantes à l'obtenir.

Dans l'analyse antitrust, s'il y a un petit nombre d'entreprises dominantes et si la part de marché qu'elles représentent est grande, on parle généralement de « concentration », dont la mesure est couramment donnée par la part de marché représentée par un nombre donné des plus grandes entreprises. L'indice plus complexe d'Herfindahl-Hirschman (HHI) va plus loin en tenant compte aussi des asymétries de taille des offreurs[21]. Cet indice combine les effets du petit nombre d'entreprises et de la dispersion des parts de marché, ce qui rejoint la question des asymétries évoquée ci-dessous.

Au moins aux États-Unis, et peut-être dans d'autres pays Membres de l'OCDE, on peut constater une tendance à accorder moins d'importance à la concentration dans l'estimation de la probabilité d'une interaction coordonnée[22]. Cette évolution semble être due à une plus grande prise en compte du rôle important joué par les barrières à l'entrée ainsi que par d'autres facteurs qualitatifs. Il n'en reste pas moins que de nombreux pays se fondent sur la concentration pour dresser au moins des garde-fous dans le cas de fusion et comme un facteur parmi d'autres pour estimer la probabilité d'une interaction coordonnée en cas de fusion en dehors des garde-fous[23].

Hay et Walker (1993:43) ont bien résumé la situation en ce qui concerne le rôle de la concentration :

> Il est à la mode de ne pas accorder trop d'importance à la concentration dans l'évaluation de la concurrence. Cependant…. l'indication la plus utile fournie par la théorie économique est qu'un niveau élevé de concentration est susceptible de se traduire par des prix plus élevés et des pertes d'efficience allocative. On sait que d'autres facteurs peuvent compenser les effets de la concentration, que ce n'est pas une condition *suffisante* pour l'exercice d'un pouvoir de marché. Néanmoins, elle reste une condition *nécessaire*. En conséquence, les mesures de la concentration indiquent utilement s'il y a lieu de procéder à une analyse complète du marché dans le cas d'une fusion donnée.

3.2 Barrières élevées à l'entrée et/ou à l'expansion

Les effets des barrières à l'entrée et/ou à l'expansion sont très bien développées dans les lignes directrices édictées par plusieurs pays en ce qui concerne les fusions. *Considérées séparément,* les barrières à l'entrée, auxquelles s'ajoutent les barrières à l'expansion rencontrées par les entreprises de la frange concurrentielle, s'il en existe une, semblent agir dans un seul sens. Lorsque ces barrières tombent, il en va généralement de même du profit résultant d'une interaction coordonnée. En fait, si les barrières à l'entrée et/ou à l'expansion sont suffisamment faibles, une interaction coordonnée n'est tout simplement pas rentable, et est donc peu probable.

D'une manière générale, il existe une étroite relation entre les barrières à l'entrée et les barrières à l'expansion, mais il peut y avoir des exceptions notables. Par exemple, dans le secteur du raffinage pétrolier, des coûts récupérables élevés dressent des barrières considérables à l'entrée (et à la sortie). En revanche, les barrières à l'accroissement de la production d'un produit donné peuvent être très faibles, c'est-à-dire que la modification de la répartition des produits fabriqués dans une usine donnée n'exige que peu ou pas d'investissements en capital.

Les barrières à l'expansion *entre entreprises dominantes* ont un effet plus ambigu que les barrières à l'entrée. Si les barrières à l'expansion diminuent, les entreprises dominantes se trouvent davantage incitées à tricher ; mais, en même temps, leur capacité de punir la tricherie augmente aussi.

3.3 Preuve d'une interaction coordonnée sur d'autres marchés ou sur le même marché par le passé

La preuve d'une interaction coordonnée sur un marché géographique quelconque (y compris un pays) peut être utile pour évaluer la probabilité d'occurrence de ce type d'interaction sur le marché étudié[24]. Toutefois, son degré de pertinence dépend fortement des similitudes entre les marchés comparés, y compris l'identité des entreprises dominantes sur chacun d'eux[25]. A cet égard, les Directives américaines sur les fusions précisent :

> Il est probable que les conditions du marché incitent à une action coordonnée lorsque les entreprises présentes sur le marché ont participé antérieurement à une collusion explicite, et si les principales caractéristiques du marché n'ont pas sensiblement changé depuis l'incident le plus récent. Une précédente collusion explicite sur un autre marché géographique aura le même poids si les principales caractéristiques de l'autre marché à l'époque de la collusion sont comparables à celles du marché en cause[26].

La Commission européenne a également reconnu ce fait. Venit (1998:1128) a souligné que : "Dans l'affaire *Nestlé/Perrier*, la Commission a conclu, sur la base de l'évolution des prix au cours des cinq années précédant la fusion, que les sociétés avaient déjà reconnu l'intérêt et la possibilité de faire monter les prix conjointement par le passé et que la concentration envisagée allait faciliter et renforcer la probabilité de la mise en œuvre d'une même stratégie".

3.4 Elasticité-prix de la demande sur le sous-marché composé des produits des entreprises dominantes

Lorsqu'on examine une fusion, il est généralement nécessaire de définir le marché en cause. A cet effet, on étudie dans quelle mesure les consommateurs sont prêts à acheter des produits de substitution à ceux dont les prix risquent de monter après la fusion. Sur la base de ce type d'information, les services de la concurrence pourraient être en mesure d'estimer l'élasticité-prix de la demande du sous-marché constitué par les produits des entreprises dominantes. Toutes autres choses étant égales par ailleurs, une diminution de l'élasticité-prix de la demande pour les produits des entreprises dominantes se traduit par une plus forte incitation à se lancer dans une interaction coordonnée, et une moindre incitation à tricher[27]. Comme cela a été mentionné à propos de la concentration, l'importance de l'élasticité-prix de la demande pour le groupe de produits des entreprises dominantes sera d'autant plus grande que les économies d'échelle réalisées dans le secteur sont plus importantes.

3.5 Elasticité-prix de la demande adressée individuellement aux entreprises dominantes - importance de la différenciation des produits

Une faible élasticité-prix de la demande pour les produits des entreprises dominantes contribue à augmenter la probabilité d'une interaction coordonnée, mais l'inverse peut être vrai en ce qui concerne l'impact de l'élasticité de la demande pour chacune de ces entreprises. Plus ces élasticités individuelles sont faibles, plus le degré de différenciation des produits est grand dans l'offre des entreprises dominantes.

En ce qui concerne la différenciation des produits, l'opinion qui prévaut est qu'elle rend une interaction coordonnée plus difficile parce qu'elle exige de la part des entreprises désireuses de coordonner leur action qu'elles résolvent le problème épineux de la détermination et du respect de différentiels de prix appropriés pour leurs produits. Ce point de vue se retrouve dans les lignes directrices concernant les fusions d'au moins deux pays[28], et a très bien été décrit de la manière suivante :

> … dans l'ensemble, les craintes d'une collusion sont limitées à des secteurs dans lesquels les produits sont relativement homogènes, avec peu de différenciation ou de personnalisation. En effet, il est plus facile de s'entendre sur un barème de prix lorsque les produits sont comparables que lorsqu'ils ont tous des caractéristiques différentes, se vendent à des prix très différents et peuvent être adaptés à la demande des clients[29].

La différenciation des produits peut donc poser des problèmes de différentiels de prix, mais elle peut aussi susciter des dissensions en incitant les entreprises à préférer des niveaux de prix globaux différents, même si elles ont les mêmes courbes de prix marginaux, mais à pente ascendante[30].

Enfin, on fait valoir que plus les produits des entreprises dominantes sont homogènes, plus la probabilité d'une concurrence sur les prix acharnée et nuisible (pour les producteurs) est forte, et donc plus le désir d'action coordonnée est grand pour éviter cette rivalité sur les coûts. Toutefois, la réalité ne semble pas être aussi implacable que ce raisonnement le paraît. L'homogénéité des produits peut, certes, inciter à coopérer, mais elle incite aussi davantage à tricher[31]. Pour compliquer encore les choses, elle accroît en même temps la capacité de punir la tricherie.

Il faut nuancer en ce qui concerne le lien entre la différenciation des produits et une moindre probabilité d'interaction coordonnée. Tout d'abord, le degré de différenciation des produits n'est pas une donnée immuable. Conscientes de la menace qu'il constitue pour une interaction coordonnée, les entreprises dominantes peuvent s'efforcer de réduire le degré de différenciation des produits ou au moins d'en limiter les effets. Par exemple, dans les années 1950, l'action concertée dans le secteur de l'équipement électrique aux États-Unis a porté sur les prix et en particulier sur un barème de fixation de prix harmonisés[32]. Les entreprises pourraient aussi se mettre d'accord sur un ensemble de normes communes ayant pour effet de réduire la diversité des produits[33]. Elles pourraient même faire pression sur les pouvoirs publics pour qu'ils adoptent ces normes à des fins légitimes telles que la protection de l'environnement.

Même lorsque les entreprises ne parviennent pas à réduire la différenciation des produits, on pourrait dire qu'un degré élevé de différenciation des produits modifie la forme plus qu'il ne diminue la probabilité d'une interaction coordonnée. Au lieu de se lancer dans une action concertée sur les prix, les entreprises pourraient s'entendre pour se répartir le marché par type de produit ou par zone géographique, ou bien pour adopter des contraintes mutuelles de limitation de capacités nouvelles[34]. La première de ces solutions a aussi l'avantage de permettre de détecter plus facilement les tricheries et d'accroître la probabilité de pouvoir punir les tricheurs (parce que les prix plus bas peuvent être concentrés sur quelques segments de marché bien choisis).

Kantzenbach et al. (1995,17) décrivent longuement la manière dont la différenciation des produits peut influer sur la probabilité d'une interaction coordonnée et formulent cette remarque générale :

> … sur les marchés sur lesquels les produits sont hétérogènes et donc où l'élasticité-prix de la demande est faible, l'incitation à tricher … tend à être moins forte. Les entreprises doivent offrir des baisses de prix relativement importantes ou bien, d'une manière générale, intensifier leurs efforts concurrentiels si elles veulent accroître la demande de leurs produits. Dans ces conditions, la tricherie n'est pas très profitable. Cependant, il n'est pas certain qu'une forte élasticité-prix de la demande enregistrée par les entreprises prises individuellement contribue en pratique à réduire le risque de collusion ; c'est à voir au cas par cas. Comme, dans ces conditions, l'éclatement d'une collusion risquerait de déclencher une concurrence particulièrement acharnée, la crainte d'un tel éclatement peut être suffisante pour maintenir et stabiliser une domination collective. La question importante est de savoir dans quelle mesure les entreprises ont évalué les avantages à long terme qu'elles peuvent retirer d'une collusion, et à quel horizon elles prennent leurs décisions.

Nous retiendrons provisoirement l'opinion classique selon laquelle une différenciation des produits réduit le risque d'une action coordonnée, tout en reconnaissant que cette idée doit être appliquée avec précaution.

3.6 Asymétries dans les coûts de production et l'intégration verticale

Une forte différenciation des produits n'est pas la seule cause possible de difficultés pour prendre en compte les différences de niveau général des prix préféré. Des conflits peuvent aussi trouver leur origine dans des courbes différentes de coûts marginaux résultant par exemple de techniques de production différentes[35]. Les différences de coûts, quelle que soit leur cause, non seulement rendent plus difficile toute coordination, mais aussi peuvent réduire directement les incitations à coopérer, au moins en ce qui concerne les entreprises les plus efficientes. Comme l'ont indiqué Kantzenbach et al. (1995,61) :

> Les structures de coût des offreurs sont un élément clé dans l'évaluation de l'asymétrie des intérêts. Si une société au sein d'un oligopole bénéficie d'un avantage de coût de façon persistante, cela risque d'aller à l'encontre d'une harmonie des intérêts et de susciter une incitation à un comportement concurrentiel agressif.

Des différences de degré d'intégration verticale peuvent aussi être une source de coordination empêchant des différences de coût[36]. Cela peut même avoir un double impact, parce que les acheteurs peuvent préférer traiter avec des entreprises avec lesquelles elles ne sont pas en concurrence, c'est-à-dire que l'intégration verticale peut en fin de compte accroître la différenciation des produits[37].

3.7 Asymétrie dans la taille des entreprises

Outre ses liens probables avec les différences en termes de coût-efficacité et de préférences des consommateurs, l'asymétrie dans la taille des entreprises dominantes peut exercer un impact direct sur la probabilité d'interaction coordonnée. Il peut exister une relation générale entre la taille d'une entreprise et ses coûts du capital. De ce fait, des entreprises dominantes peuvent avoir des capacités différentes à résister dans une guerre des prix. Dans un cas extrême, la facilité d'accès à des financements complémentaires pourrait même conduire une ou plusieurs entreprises à croire qu'elles sont en mesure de gagner une guerre des prix (c'est-à-dire d'être capables de faire monter les prix après avoir fait disparaître leurs concurrents, ce qui, bien entendu, dépend de l'existence de barrières suffisamment élevées à l'entrée). Ces entreprises seraient naturellement beaucoup moins incitées à coopérer avec leurs rivales. De plus, des variations suffisantes du coût du capital sont de nature à se traduire par des points de vue divergents en ce qui concerne l'arbitrage entre les profits présents et les profits futurs. Il est même possible qu'une ou plusieurs

entreprises s'intéressent si peu aux profits futurs qu'elles aient très envie de tricher même s'il est pratiquement sûr qu'elles réaliseront de ce fait moins de profits futurs[38].

3.8 Présence d'un franc-tireur

La présence d'un franc-tireur, surtout s'il s'agit d'une des entreprises dominantes sur le marché, peut avoir une forte incidence sur la probabilité d'une interaction coordonnée sur un marché. Les Directives américaines sur les fusions présentent un bon exposé du phénomène du franc-tireur :

> Dans certains cas, une interaction coordonnée peut effectivement être évitée ou limitée par des francs-tireurs - les entreprises qui ont de plus fortes raisons économiques de prendre leurs distances par rapport aux conditions d'une action coordonnée que la plupart de leurs rivales (c'est-à-dire les entreprises qui exercent des influences particulièrement perturbatrices et concurrentielles sur le marché). En conséquence, l'acquisition du franc-tireur est l'une des façons par laquelle une fusion peut rendre une interaction coordonnée plus probable, plus fructueuse ou plus complète. Par exemple, sur un marché où les contraintes de capacité sont fortes pour de nombreux concurrents, une entreprise a d'autant plus de chances d'être un franc-tireur qu'elle dispose d'une forte capacité excédentaire ou reconvertible par rapport à ses ventes ou sa capacité totale, et que ses coûts directs et coûts d'opportunité pour l'accroissement de ses ventes sur le marché en question sont faibles.
>
> Cela s'explique parce qu'une entreprise est d'autant plus incitée à s'écarter des conditions de l'action coordonnée - hausse des prix et limitation de la production - qu'elle est en mesure d'accroître sa production de façon profitable par rapport aux ventes qu'elle pourrait réaliser si elle respectait les conditions de l'action coordonnée et que la part des ventes sur lesquelles elle réalise des profits supérieurs avant sa décision de ne pas respecter les conditions de l'action coordonnée est faible. Une entreprise peut aussi être un franc-tireur si elle a une capacité particulière et secrète d'accroître ses ventes par rapport aux ventes qu'elle réaliserait si elle respectait les conditions de l'action coordonnée. Cette capacité peut résulter de possibilités d'augmenter la production captive d'une filiale en aval[39].

Si l'on applique ce qui vient d'être dit ainsi que les trois précédents facteurs d'asymétrie (différenciation des produits, asymétrie des coûts de production/d'intégration verticale et différences de taille des entreprises) à l'analyse des fusions, certains problèmes apparaissent. Tout d'abord, à une exception près, les fusions dans lesquelles les entreprises dominantes ne jouent aucun rôle ne changent pas le degré d'asymétrie des parts de marché entre les entreprises dominantes. L'exception est lorsqu'une fusion de deux ou plusieurs entreprises non dominantes aboutit à la formation d'une entreprise suffisamment grande pour qu'elle puisse rejoindre le groupe des entreprises dominantes.

Lorsqu'une fusion accroît les asymétries entre les entreprises dominantes sur un marché, il semble qu'en général, sur la base de ce qui a été dit précédemment, elle contribue à réduire la probabilité d'une interaction coordonnée. Bien sûr, il faut être très prudent lorsqu'on applique cette généralisation à une fusion particulière. Prenons, par exemple, le cas dans lequel la plus petite des quatre entreprises dominantes sur le marché est un franc-tireur. Dans ces conditions, une fusion entre n'importe lesquelles des trois autres entreprises pourrait de façon plausible accroître à la fois l'asymétrie des parts de marché des entreprises dominantes et la probabilité d'une interaction coordonnée. La brusque augmentation de la taille de ses concurrents pourrait transformer le franc-tireur en un partenaire de l'action coordonnée. En revanche, si le franc-tireur reprend n'importe laquelle des trois autres entreprises dominantes, il pourrait devenir moins coopératif, c'est-à-dire que cette fusion pourrait à la fois réduire l'asymétrie et la probabilité d'une interaction coordonnée.

Il n'est guère surprenant que diverses lignes directrices concernant les fusions soient assez ambiguës quant à l'effet global des asymétries. Par exemple, le document allemand précise :

> Un oligopole symétrique composé d'entreprises détenant des parts de marché tout à fait comparables et disposant de ressources comparables et d'une même facilité d'accès aux marchés d'approvisionnement ou de vente a tendance à ne pas être concurrentiel, car toute action concurrentielle serait perceptible de façon égale par toutes les entreprises, facilement détectable du fait de la transparence de la conduite concurrentielle et guère profitable puisque toutes les entreprises disposent d'un même potentiel de réplique.

On remarquera que ce paragraphe est nuancé un peu plus loin : « l'asymétrie d'un oligopole, en revanche, n'est pas en soi un indice suffisant de concurrence substantielle entre les membres de l'oligopole, mais les oligopoles asymétriques ont un plus grand potentiel de conduite concurrentielle individuelle »[40].

3.9 Économies d'échelle et coûts irrécupérables

Si les économies d'échelle sont particulièrement grandes, et en particulier si les coûts unitaires augmentent rapidement lorsque la production tombe au-dessous des niveaux techniquement optimaux (capacité), les entreprises sont généralement prêtes à recourir à la concurrence par les prix pour éviter que leur production ne tombe très en-dessous de leur capacité. On ne peut évaluer pleinement les effets de ce phénomène sans remarquer que les économies d'échelle sont étroitement liées aux coûts que représentent les investissements non récupérables. En outre, plus les coûts irrécupérables sont élevés, plus le ratio des coûts variables aux coûts fixes est en général élevé.

Au total, on peut dire en généralisant que plus les économies d'échelle sont grandes, plus les guerres de prix ont tendance à être fréquentes et destructrices. Les prix peuvent chuter bien avant que les entreprises se trouvent dans une situation où elles ne sont plus en mesure de couvrir leurs coûts variables. Avec des coûts irrécupérables énormes, aucune entreprise ne souhaite sortir du marché définitivement. Paradoxalement, si toutes les entreprises dominantes ont conscience de ces paramètres, et elles peuvent tirer les leçons de l'expérience, il se peut que de fortes économies d'échelle et d'importants coûts irrécupérables contribuent à encourager une interaction coordonnée. En d'autres termes, les entreprises doivent à juste titre chercher à éviter une concurrence sur les prix mutuellement destructrice[41].

Toutefois, il ne faut pas oublier que les économies d'échelle et les coûts irrécupérables ont aussi une incidence sur la probabilité d'une interaction coordonnée du fait de leur impact sur les incitations à tricher et les possibilités de punir les tricheurs. Des coûts marginaux faibles pourraient rendre intéressant un niveau minimum de tricherie[42]. En ce qui concerne la punition des tricheurs, des coûts marginaux qui se situeraient au-dessous des coûts moyens devraient la faciliter. La sanction pourrait même revêtir la forme de prix inférieurs au niveau concurrentiel, c'est-à-dire au coût moyen minimum.

3.10 Degré de transparence et capacité d'adopter certains comportements de façon crédible

On peut approximativement définir le degré de transparence d'un marché comme étant la vitesse à laquelle les entreprises dominantes peuvent s'informer de façon fiable des actions de leurs concurrentes. D'une manière générale, la transparence contribue à faciliter la réalisation d'un accord, et à diminuer la tentation de tricher en réduisant le délai nécessaire à la découverte de la tricherie[43]. Les entreprises dominantes se trouvent fortement incitées à accroître la transparence sur leur marché ainsi qu'à s'engager de façon crédible à adopter une conduite améliorant la coopération. Voyons maintenant comment elles peuvent y parvenir, soit unilatéralement, soit collectivement :

1. Créer des associations sectorielles (y compris des centres d'information et de recherche) et publier des revues professionnelles.

Ces associations accroissent la transparence dans la mesure où elles servent à réunir et à diffuser de l'information. Elles donnent aux concurrents l'occasion de se rencontrer et de sympathiser de manière à instaurer une confiance mutuelle, et ainsi de s'engager dans une collusion explicite.

2. Fournir des informations soit directement aux concurrents, soit à un nombre suffisant de tiers qui, de toute façon, les répercuteront aux concurrents.

Plusieurs types d'échange d'informations sont plus particulièrement de nature à faciliter une interaction coordonnée. C'est le cas par exemple de la fourniture régulière de données courantes détaillées sur les ventes ou les coûts et de l'annonce préalable de changements de prix non contraignants (surtout sur les marchés caractérisés par un leadership de prix). L'annonce préalable de changements de prix est une méthode intéressante, parce que s'accompagnant d'un très faible risque, qui permet de déterminer si d'autres entreprises sont prêtes à modifier leurs prix en réaction à l'annonce des intentions d'une "locomotive". Si les autres entreprises dominantes ne font pas des annonces du même ordre dans un délai raisonnable, alors le changement de prix peut toujours être annulé.

Il arrive que des services de réglementation apportent une aide non négligeable à l'accroissement de la transparence. Par exemple, c'est ce qui se passe lorsqu'ils exigent des entreprises qu'elles publient à l'avance les changements de prix qu'elles ont l'intention de pratiquer. Pour les entreprises dont les prix sont encadrés, cette annonce préalable peut se justifier comme un moyen de faciliter un débat public sur les changement de prix demandés. Pour les entreprises dont les prix ne sont pas encadrés, cette exigence confère une plus grande protection à une pratique quelque peu suspecte. Pire encore, elle élimine automatiquement toute baisse de prix surprise, ce qui contribue à stabiliser une interaction coordonnée.

3. Normaliser les postes comptables et/ou les produits et les conditionnements.

D'une manière générale, tout ce qui va dans le sens d'une normalisation ne peut que faciliter la réalisation de différentes formes d' "accords" entre entreprises..

4. Établir des liens structurels (évoqués ci-dessous), y compris partager des droits de propriété intellectuelle.

Tant le processus que les résultats de cette démarche contribuent sensiblement à améliorer la transparence.

5. Adopter des systèmes de prix livraison comprise.

Carlton et Perloff (1990:427) décrivent ce type de système :

> Un système de *prix livraison comprise* indique le prix total (transport compris) qu'un acheteur doit payer en fonction du lieu de son implantation : le prix payé par l'acheteur n'est pas fonction de la localisation du vendeur. On peut mettre en place un système de prix livraison comprise en précisant le prix total du produit livré, c'est-à-dire la somme du prix courant en un lieu précis - ce qu'on appelle le *point de parité* - auquel s'ajoute le transport à partir de ce lieu.

6. Procéder à une intégration verticale vers le consommateur final et/ou pratiquer un prix minimum de vente au détail.

Le prix final est plus facile à observer que le prix à la production, mais sans intégration verticale ou prix imposés, les changements du prix final ne sont pas nécessairement imputés au fournisseur du produit, c'est-à-dire que la variation de prix peut être due à des variations de marge des distributeurs.

7. Faire figurer des clauses d'alignement sur la concurrence et « de la nation la plus favorisée » dans les contrats de vente.

Les vendeurs peuvent recourir à des clauses d'alignement sur la concurrence pour s'engager par contrat à s'aligner, parfois rétroactivement, sur les conditions plus favorables offertes par d'autres fournisseurs. Les clauses "alignement ou non-obligation d'achat" sont une version moins rigoureuse de cette formule.

Les clauses d'alignement sur la concurrence sont particulièrement utiles en ce qu'elles ont pour effet de transformer les acheteurs en surveillants de l'interaction coordonnée. Quand ce type de clause est généralisé sur un marché, chaque entreprise dominante sait que si elle triche, elle sera rapidement découverte et que ses concurrents sont dans l'obligation contractuelle de la "punir". Cette possibilité de punir les tricheurs est importante parce que les tricheurs potentiels savent que leurs concurrents préfèrent brandir des menaces plutôt que d'augmenter leur production et de faire baisser les prix en cas de tricherie.

En ce qui concerne les clauses de la nation la plus favorisée, ces dispositions contractuelles peuvent tout à fait freiner les vendeurs qui imagineraient procéder secrètement à une discrimination par les prix, c'est-à-dire tricher.

8. Encourager les acheteurs par appel d'offres à utiliser des offres normalisées (c'est-à-dire des produits spécifiques plutôt que des caractéristiques de performances) et annoncer publiquement les résultats de l'appel d'offres.

Ces pratiques, couramment adoptées par les pouvoirs publics pour les marchés publics de façon à lutter contre la corruption et assurer une juste attribution des marchés, pourraient finalement se révéler très coûteuses si elles permettaient aux fournisseurs de se lancer beaucoup plus facilement dans une interaction coordonnée, surtout lorsque ces entreprises sont peu nombreuses et coordonnent souvent leur action. Elles pourraient également se révéler dangereuses parce qu'il n'y a pas à choisir entre la lutte contre la corruption et la stimulation de la concurrence. Comme le précise la note de référence de l'OCDE pour une récente mini-table ronde sur la passation des marchés :

> La corruption n'est possible que s'il existe des rentes monopolistiques. Réduire ces rentes diminue le montant des fonds pouvant être utilisés à des fins de corruption et, partant, l'incidence et la gravité de cette dernière. Favoriser la concurrence a donc pour effet de réduire la corruption[44].

9. Instaurer des liens étroits entre les entreprises dominantes.

Il y a une foule de manières (en dehors des liens de capitaux) dont les entreprises dominantes usent pour ressembler davantage à leurs concurrents et être plus transparentes pour eux, tout en s'engageant à entretenir une relation de plus grande coopération avec eux. Il peut s'agir de participations croisées au conseil d'administration (sans contrôle), du partage de droits de propriété intellectuelle, notamment par le biais d'entreprises conjointes de R-D, de la mise en commun des brevets et du large usage des rétrocessions[45], de la propriété partagée de fournisseurs ou des circuits de distribution, et d'accords de spécialisation de la production.

Il faut surveiller de près les licences croisées de droits de propriété intellectuelle, surtout lorsque les parties n'ont pas un besoin absolu d'accéder à la technologie de l'autre pour être concurrentielles. Il faut également faire attention aux conditions des rétrocessions dans lesquelles les licenciés acceptent de partager avec les cédants les brevets de perfectionnement qu'ils pourraient déposer[46].

Les neuf pratiques évoquées ci-dessus peuvent se justifier plus ou moins comme étant des moyens légitimes d'améliorer l'efficacité et de favoriser potentiellement les consommateurs. Néanmoins, du fait de leurs effets sur la transparence et du renforcement de la capacité à s'engager de façon crédible dans une coopération, ils accroissent aussi la probabilité d'une interaction coordonnée. C'est le cas en particulier sur les marchés caractérisés par des niveaux élevés de concentration, des barrières élevées à l'entrée et d'autres facteurs favorables à une interaction coordonnée.

3.11 Phase de développement du secteur et variabilité de la demande sur le marché

La perspective de profits stables à long terme favorise généralement la collusion ; de fait, la collusion est plus difficile en l'absence d'une telle perspective[47]. Il en découle que la probabilité d'une interaction coordonnée diffère selon la phase de développement d'un secteur et la variabilité de la demande sur le marché. Gugler (1998,925) souligne que :

> Dans les [premières] phases d'expérimentation et de développement d'un marché, les conditions de la concurrence sont soumises à des changements constants et ne laissent guère de marge de manœuvre durable. En revanche, dans les phases de maturation et de stagnation, les conditions du marché ne changent plus beaucoup, ce qui est propice à l'adoption d'un comportement de type collusion. Par exemple, dans l'affaire Nestlé/Perrier, la Commission européenne a considéré que la stabilité du marché, en particulier la maturité technologique du marché, facilite la collusion entre les entreprises. Néanmoins, quand le marché atteint son stade final (fin du cycle du produit et/ou du cycle de la technologie), les conditions favorables à l'adoption d'un comportement individuel sont de nouveau remplies. En fait, en fin de vie d'un produit et/ou d'une technologie, les entreprises sont moins tentées d'adopter ou de conserver un comportement collusoire, car les profits d'une coopération future sont incertains, sinon proches de zéro, puisque la fin du jeu est annoncée et relativement prévisible.

Il faut aussi remarquer que dans les premiers stades de développement d'un secteur, il y a un plus grand nombre de facteurs de concurrence pour les entreprises, ce à quoi il faut ajouter une croissance globale beaucoup plus rapide. En conséquence, une concertation est à la fois plus difficile et moins nécessaire dans les phases préliminaires que dans les phases ultérieures..

Outre le stade de développement, la variabilité générale de la demande sur le marché est un élément important. Moins la demande varie sur le marché, plus la probabilité de collusion est grande, toutes autres choses étant égales par ailleurs[48]. De fait, avec une demande relativement stable sur le marché, les entreprises peuvent mieux déduire qu'il y a eu tricherie en cas de fortes fluctuations de leurs propres ventes. En outre, l'incidence moyenne d'un excédent de capacité tend à augmenter en même temps que le degré de variabilité de la demande sur le marché, même s'il est difficile de prédire en quoi cela peut affecter la probabilité d'une interaction coordonnée. Un excédent de capacité implique des coûts marginaux très bas, ce qui ne peut qu'encourager à tricher, mais en même temps il devient plus facile de punir les tricheurs.

3.12 Présence de gros acheteurs et influence du volume et de la fréquence des achats

Dans la mesure où les commandes sont groupées, portent sur de gros volumes et ne sont pas très fréquentes, la probabilité d'une interaction coordonnée est faible. En effet, les entreprises sont beaucoup

plus tentées de tricher si quelques contrats à prix spéciaux se traduisent par une forte augmentation de la part de marché. Ce type de tricherie est difficile à détecter et, même si elle est observée, les concurrents risquent de devoir attendre longtemps avant d'avoir l'occasion de punir le coupable en baissant leurs prix. Les marchés se prêtent beaucoup moins à une interaction coordonnée lorsque des augmentations importantes de parts de marché exigent des remises "secrètes" fréquentes impliquant un grand nombre d'acheteurs[49].

L'importance des gros acheteurs, surtout dans le contexte du contrôle des fusions, est souvent liée au fait que ces acheteurs ont les moyens de se défendre contre une augmentation de prix anticoncurrentielle. Comme le souligne Denis (1992,9), c'est très différent de leur incidence sur une action coordonnée.

> Le rôle des gros acheteurs dans le domaine de l'interaction coordonnée n'est dû ni aux moyens sophistiqués qu'ils peuvent mettre en œuvre ni à leur capacité annoncée de se protéger. En fait, la question est de savoir si les vendeurs sont ou non tentés de ne pas respecter les conditions de l'action concertée parce que les gains qu'ils peuvent retirer d'un gros contrat à long terme sont très supérieurs aux pertes qu'ils subiraient s'ils étaient pris après coup.

3.13 Intensité des contacts sur plusieurs marchés (par produit ou géographique) entre les entreprises dominantes

Plus les marchés sur lesquels les entreprises dominantes entrent en contact sont nombreux, plus il est probable qu'elles se lancent dans une action coordonnée. C'est ce qu'expliquent Kantzenbach et al. (1995,73-74) :

> Les contacts sur plusieurs marchés permettent aux fournisseurs d'obtenir des informations complémentaires sur leurs concurrents, facilitent une action concertée et offrent des moyens supplémentaires de représailles s'il se trouve qu'une autre entreprise a triché. Les interdépendances entre des situations concurrentielles sur différents marchés et les incitations qui en découlent, et aussi les occasions toutes particulières de communiquer pour les fournisseurs opérant sur ces marchés devraient exercer une influence notable sur l'évaluation de la probabilité d'occurrence d'une collusion [explicite et implicite].

Les contacts sur de multiples marchés sont censés contribuer à une interaction coordonnée des compagnies aériennes américaines[50].

3.14 Conclusions relatives aux facteurs

Il y a lieu de formuler quelques remarques générales concernant la liste des treize facteurs évoqués ci-dessus :

1. lorsqu'on veut repérer et évaluer des facteurs ayant une incidence sur la probabilité d'une interaction coordonnée, il est certainement utile de considérer les incitations des entreprises dominantes ainsi que leur capacité de parvenir à un accord et aussi de tricher par rapport aux conditions de cet accord, et également leur aptitude à découvrir la tricherie et à dissuader les tricheurs ;

2. un même facteur peut parfois avoir des effets opposés sur différents aspects des incitations et des capacités des entreprises à coordonner leur comportement ;

3. comme de nombreux facteurs interagissent, pour déterminer leur effet combiné, il faut les examiner collectivement et non un à un ;

4. il peut arriver fréquemment qu'un ou plusieurs facteurs sur un marché donné justifient que l'on prédise une forte probabilité d'interaction coordonnée, alors que d'autres facteurs semblent indiquer l'inverse. Malheureusement, il n'est pas possible de généraliser quant à la manière de procéder à une évaluation globale dans ces situations ; autrement dit, il n'existe pas de pondération universelle que l'on puisse utiliser pour ces facteurs.

Malgré cette dernière remarque, il peut y avoir des marchés sur lesquels la concentration ou les barrières à l'entrée sont suffisamment faibles pour qu'une interaction coordonnée se trouve exclue. Dans toutes les autres situations, il faut procéder à un examen attentif, couvrant le plus grand nombre possible de facteurs différents (et ouvert à de nouveaux facteurs), avant de pouvoir formuler une évaluation fiable de la probabilité d'une interaction coordonnée[51]. Les exemples d'affaires de fusion ou d'autres types d'affaires présentés à l'Annexe II du présent document illustrent bien la nécessité d'examiner de très nombreux facteurs.

4. Comment les services de la concurrence peuvent réduire l'incidence et la gravité d'une interaction coordonnée

A part l'application des interdictions de toute collusion explicite (qui sortirait largement du cadre du présent document), quatre moyens assez judicieux devraient permettre de réduire l'incidence et la gravité d'une interaction coordonnée : interdire les fusions qui accroissent sensiblement la probabilité d'une interaction coordonnée et n'offrent pas suffisamment de gains d'efficience, décourager le recours à des pratiques facilitant une action coordonnée, démanteler les entreprises d'État avant leur privatisation et abaisser les barrières à l'entrée ou élargir autrement les dimensions des marchés géographiques et des marchés de produits. La plupart de ces approches exigent de la part des services de la concurrence une action auprès des pouvoirs publics pour qu'ils modifient la politique de la concurrence.

4.1 Contrôle des fusions

On peut, et on doit, procéder à un contrôle des fusions pour éviter la création de structures de marché de nature à favoriser toutes sortes d'interactions coordonnées. En effet, les services de la concurrence ont du mal à lutter avec succès contre diverses formes de collusion et ils se heurteraient à des problèmes encore plus grands s'ils tentaient d'interdire des réactions collusoires à une interdépendance reconnue. Heureusement, la plupart des pays Membres de l'OCDE, sinon tous, semblent partager ce point de vue. Par exemple, les Directives américaines concernant les fusions soulignent bien que :

> Une fusion peut réduire la concurrence en permettant aux entreprises opérant sur le marché en cause, et cela plus probablement, plus complètement ou avec plus de succès, de se lancer dans une interaction coordonnée nuisible pour les consommateurs… Ce comportement recouvre toute collusion implicite ou explicite, *et peut être ou non légal en soi*[52].

L'opposition de la Commission européenne à diverses fusions telles que celles de *Nestlé/Perrier* et de *Kali & Salz* (Cf. Annexe II) témoigne du même point de vue. Cette dernière affaire est particulièrement significative parce qu'elle a donné à la Cour européenne de justice l'occasion d'affirmer que les réglementations de l'Union européenne en matière de fusions visent à empêcher les fusions de nature à créer ou à renforcer une position dominante collective[53]. Les lignes directrices en matière de fusions d'au moins trois autres pays vont dans le même sens : il faut procéder à un examen des fusions pour

lutter contre l'émergence de structures sectorielles de nature à favoriser une quelconque forme d'interaction coordonnée, et pas seulement une collusion explicite[54].

On peut utiliser le contrôle des fusions non seulement pour éviter des changements structurels nuisibles pour la concurrence, mais aussi pour réduire la probabilité d'un comportement anticoncurrentiel après la fusion. Par exemple, pour réduire la probabilité d'une interaction coordonnée, les parties à la fusion pourraient être contraintes de se retirer d'une association sectorielle, cesser de faire des annonces préalables de prix indicatifs, supprimer les clauses d'alignement sur la concurrence ou de la nation la plus favorisée de leurs contrats de vente, ne pas pratiquer des prix livraison comprise, etc. Beaucoup d'autorités de la concurrence acceptent des fusions dès lors que les parties souscrivent des conditions de ce type. Malheureusement, avec cette approche, les services de la concurrence doivent surveiller en permanence le comportement des entreprises et, dans certains cas de non-respect des engagements, ils ont énormément de mal à faire appliquer la loi. C'est pourquoi la plupart des services de la concurrence préfèrent des solutions structurelles plutôt que comportementales aux problèmes de concurrence posés par les fusions.

4.2 Réduire l'incidence des pratiques facilitant une interaction coordonnée

La liste des pratiques de nature à accroître la transparence et la capacité de respect des engagements, évoquées dans la section précédente, ne prétendait pas être exhaustive. Les services de la concurrence doivent veiller à débusquer les nouveaux moyens que les entreprises dominantes pourraient trouver pour atteindre les mêmes buts. Toutefois, ils doivent aussi être très prudents lorsqu'il s'agit d'essayer d'éradiquer ces pratiques. En effet, beaucoup de ces pratiques, sinon toutes, peuvent être tout à fait inoffensives, voire favorables à la concurrence. Par exemple :

1. l'échange d'informations sur les antécédents de crédit entre fournisseurs concurrents est un bon exemple d'échange direct d'informations, mais, dans la plupart des cas, il est plus de nature à encourager qu'à décourager la concurrence ;

2. une normalisation comptable devrait améliorer le gouvernement d'entreprise, accroître le recours aux rachats d'entreprises pour combattre une gestion inefficiente et, d'une manière générale, augmenter l'efficience du marché des capitaux ;

3. une normalisation des produits et des conditionnements pourrait abaisser les barrières à l'entrée et réduire les coûts de fabrication ainsi que les coûts de protection de l'environnement[55] ;

4. une coopération en matière de recherche et développement pourrait réduire les coûts d'une duplication des recherches (même si cela risque de se faire au prix d'un ralentissement de l'innovation) et permettre aux petites entreprises d'étaler plus efficacement leurs coûts fixes ;

5. une intégration verticale peut réduire les coûts de coordination et de transaction, supprimer le phénomène de double marge, permettre une discrimination de prix efficiente et empêcher une substitution inefficiente ;

6. un prix minimum de revente au détail pourrait être un moyen plus efficace d'amener le revendeur à fournir des services de distribution que l'exclusivité territoriale.

Toutes autres choses étant égales par ailleurs, la menace concurrentielle résultant des pratiques qui renforcent la transparence et le respect des engagements sera plus forte : plus la diversité des pratiques est grande, plus la part de marché cumulée des entreprises y recourant est grande et plus la simultanéité de ce recours est marqué, et moins les arguments d'efficience sont plausibles.

Dans le cadre d'une recherche des remèdes à une collusion explicite, il faut porter une attention toute particulière aux pratiques renforçant la transparence et le respect des engagements. Dans des cas exceptionnels, où elles ont un effet anticoncurrentiel clair et direct, elles pourraient même donner lieu à une affaire de collusion explicite. Elles pourraient aussi être poursuivies comme des abus possibles de position dominante, en particulier dans les pays où la définition de la domination englobe l'aspect collectif aussi bien que l'aspect individuel. Enfin, et c'est loin d'être le moins important, pour les secteurs réglementés et les marchés publics, les services de la concurrence devraient œuvrer en faveur d'une modification des mesures qui facilitent une interaction coordonnée.

4.3 Démanteler les entreprises d'État intégrées verticalement avant leur privatisation

Dans leur mission de défense de la concurrence, les services de la concurrence doivent chercher à faire en sorte que les avantages attendus d'une privatisation et d'une réforme de la réglementation soient obtenus et répercutés sur les consommateurs. Comme bon nombre d'expériences l'ont amplement prouvé, il s'agit avant tout de veiller à ce que les marchés soient suffisamment concurrentiels[56]. Dans de nombreux cas, surtout sur les marchés où des infrastructures de réseau présentant les caractéristiques d'un monopole naturel jouent un rôle important, cette concurrence ne se développera pas correctement à moins de procéder au démantèlement tant vertical qu'horizontal des opérateurs historiques à capitaux publics ou réglementés.

Le problème de la scission verticale d'une entreprise comportant un élément de monopole naturel sortirait du cadre du présent document[57]. Comme pour les démantèlements horizontaux jugés opportuns, l'un des principaux objectifs devrait être de réduire le risque d'une interaction coordonnée. Cela exige généralement davantage que la seule création de deux ou trois concurrents, surtout s'ils sont protégés pendant un certain temps contre de nouvelles entrées[58]. Connaissant bien les effets unilatéraux et coordonnés qui peuvent être obtenus grâce aux mesures prises dans le cadre du contrôle des fusions, les services de la concurrence sont en mesure de donner un avis d'une importance fondamentale quant à l'opportunité de procéder à un démantèlement vertical et horizontal avant la privatisation.

4.4 Abaisser les barrières à l'entrée et élargir autrement les marchés géographiques et les marchés de produits

Sur de nombreux marchés, les barrières les plus évidentes à l'entrée sont les restrictions imposées par les pouvoirs publics aux investissements et aux échanges internationaux. Dans certains cas de fusion, les services de la concurrence pourraient être en mesure d'abaisser directement ces barrières en subordonnant l'approbation de l'opération à l'obtention, par les parties, d'une réduction des droits de douane, des droits antidumping et d'autres restrictions aux échanges. Il va pratiquement sans dire que les services de la concurrence devraient aussi toujours se tenir sur leurs gardes vis-à-vis des ententes internationales, car elles peuvent avoir un impact qui va au-delà de la simple annulation des avantages d'une libéralisation des échanges.

Les différences, à l'échelle internationale, entre les normes de produits et de services ainsi qu'entre les réglementations déterminant qui peut fournir les divers biens et services sont monnaie courante. En réaction, surtout sur les marchés où il n'y a qu'un petit nombre d'entreprises nationales en concurrence, les services de la concurrence devraient promouvoir l'adoption de normes harmonisées à l'échelle internationale et/ou un recours accru aux accords de reconnaissance mutuelle[59].

5. Principaux messages et principales conclusions

Le présent document avait pour objet d'examiner brièvement les différentes manières dont les entreprises dominantes dans des oligopoles peuvent exploiter leur interdépendance pour accroître

collectivement leurs profits. Il a également souligné que ces méthodes sont assez similaires quant à leurs effets économiques et aux facteurs qui tendent à encourager ou à décourager cette coopération. En outre, il a mis en évidence et, on peut l'espérer, mieux fait comprendre que les entreprises dominantes se heurtent à de sérieuses difficultés lorsqu'elles cherchent à remplacer la concurrence par une interaction coordonnée. En particulier, elles doivent non seulement élaborer les conditions de leur interaction coordonnée, mais aussi trouver les moyens de dissuader toute tricherie.

La section III a répertorié et évalué treize facteurs ayant une incidence sur les incitations et les capacités des entreprises dominantes à se lancer dans une interaction coordonnée et à tricher, ainsi que sur leur aptitude à détecter la tricherie et la dissuader. Sur certains marchés, la concentration et les barrières à l'entrée sont si faibles qu'une interaction coordonnée est manifestement infaisable ou non profitable. En dehors du cas de ces marchés, il est impossible d'évaluer la probabilité d'une telle interaction concertée sans examiner un grand nombre de ces treize facteurs, sinon tous, et leur impact total sur les incitations et les capacités à agir de façon concertée. Chaque cas diffère quant à la manière dont il faut entrecroiser ces facteurs pour procéder à une évaluation globale de la probabilité d'interaction coordonnée sur un marché donné.

Outre une lutte rigoureuse contre toute collusion explicite (présupposée plus qu'étudiée dans ce document), les services de la concurrence disposent de plusieurs moyens pour chercher à réduire l'incidence et l'intensité d'une interaction coordonnée. Deux d'entre eux, la réglementation ou le démantèlement obligatoire des entreprises dominantes, présentent de graves inconvénients. Il en reste quatre autres qui sont davantage de nature préventive que curative. Un contrôle des fusions est la mesure préventive la plus directe et probablement la plus efficace à laquelle les services de la concurrence peuvent recourir pour réduire la probabilité d'une interaction coordonnée. Malheureusement, cet outil ne peut généralement être utilisé que pour protéger le niveau de concurrence existant plutôt que pour l'améliorer. Bien que cette remarque ne s'applique généralement pas aux mesures visant à décourager les pratiques anticoncurrentielles de renforcement de la transparence et du respect des engagements, ces mesures présentent deux autres inconvénients. Premièrement, un grand nombre de ces pratiques peuvent avoir un effet aussi bien favorable à la concurrence que défavorable ; c'est pourquoi des interdictions générales ne constituent pas une solution appropriée. Deuxièmement, certains services de la concurrence ne disposent pas nécessairement des moyens juridiques nécessaires pour éradiquer ces pratiques, surtout lorsqu'on ne peut démontrer leur effet anticoncurrentiel direct (et non une simple augmentation de la probabilité d'une interaction coordonnée). En ce qui concerne le démantèlement des entreprises avant leur privatisation et l'abaissement des barrières à l'entrée ou l'élargissement des marchés géographiques et des marchés de produits, ces mesures exigent généralement plus une action de promotion de la concurrence qu'une action relevant de la police de la concurrence. Il en va de même en ce qui concerne l'élimination des pratiques facilitant une interaction coordonnée finalement ancrées dans les réglementations publiques. Toutefois, la promotion de la concurrence est porteuse de grandes promesses, surtout dans les pays où une réforme de la réglementation est en cours.

Les services de la concurrence ont beaucoup à gagner d'un partage de leur expérience en matière de préservation ou d'accroissement de la concurrence sur les marchés ologopolistes. Tout d'abord, ils auraient intérêt à savoir si les mêmes entreprises opérant sur leur marché ont fait l'objet d'enquêtes ou de poursuites pour collusion explicite, ou pour certains abus de domination. Il serait aussi intéressant de savoir si certains comportements sont observés sur des marchés où les conditions de coûts et de demande sont très différentes. Dans ce cas, et surtout si ces comportements ne semblent pas servir les intérêts individuels des entreprises dominantes, les services de la concurrence pourraient soupçonner à juste titre que les pratiques appliquées viennent à l'appui d'une interaction coordonnée. En outre, une coopération à l'échelle internationale est manifestement nécessaire et judicieuse pour lutter contre les ententes internationales. C'est tout à fait ce que reconnaît et encourage la Recommandation de l'OCDE sur les ententes injustifiables[60].

NOTES

1. Pratiquement par définition, la coopération n'est pas faisable dans des conditions de concurrence parfaite et est évidemment inutile en cas de monopole. Dans des conditions de concurrence monopolistique, la probabilité d'une coopération devrait être faible parce que, comme dans des structures plus concurrentielles, les offreurs n'ont guère l'impression d'être interdépendants et sont probablement trop nombreux pour pouvoir coopérer facilement.

   La fixation des prix dans les services fournis par des professions libérales peut être considérée comme une exception à l'idée générale qu'une coopération n'est guère probable en dehors de marchés oligopolistes. Bien sûr, les professions libérales ont montré leur pouvoir de faire monter les prix en limitant l'entrée, en imposant d'autres contraintes à l'exercice des pratiques commerciales normales et en publiant des tarifs "recommandés". Cependant, compte tenu du nombre de personnes normalement concernées, il n'est guère probable que ces professions libérales jouissent de ce pouvoir sans un mandat légal de protection du public qui, malheureusement, peut être détourné pour protéger les professionnels libéraux.

2. Viscusi et al. (1995, 97)

3. Kantzenbach et Kruse (1987, 10) proposent une définition plus technique en affirmant qu'il y a oligopole "… si la modification d'un paramètre de comportement par une entreprise d'un groupe d'entreprises concurrentes débouche sur un changement perceptible des conditions de vente pour les autres entreprises concurrentes… les conduisant à réagir en modifiant leur propre comportement sur le marché". Cette définition est citée dans Kantzenbach et al. (1995, 8).

4. Chamberlin (1933, n.14 at 48), cité dans Scherer et Ross (1990, 205)

5. Kovacic (1993, 8) confirme :

   > ... les entreprises peuvent être en mesure de coordonner leur comportement en ne faisant guère plus qu'observer et anticiper les mouvements de prix de leurs concurrents. Dans certains secteurs, ces efforts de coordination peuvent avoir des effets sur la concurrence (y compris par des prix supérieurs au niveau de concurrence) qui ressemblent à ceux d'une entente explicite.

   Cf. aussi Scherer et Ross (1990, 226).

6. Les Directives des Etats-Unis de 1992 sur les fusions horizontales précisent :

   > Il n'est pas nécessaire que les modalités d'une action coordonnée aboutissent exactement aux résultats d'un monopole pour être nuisible aux consommateurs. Au contraire, les modalités d'une action coordonnée peuvent être imparfaites et incomplètes - dans la mesure où elles ne tiennent pas compte de certains participants au marché, de certaines dimensions de la concurrence et de certains clients, ne font pas monter les prix aux niveaux pratiqués par des monopoles ou sombrent dans des guerres de prix épisodiques - et causer néanmoins beaucoup de mal sur le plan économique.

   Etats-Unis (1997, section 2.11).

7. Etats-Unis (1997, section 2.1)

8. Robert D. Willig, «Merger Analysis, Industrial Organisation Theory, and Merger Guidelines», Brookings papers: Microeconomics 1991, pp. 281-312 à 292-293.

9. Cf. Jerry Hauseman (1996). Cf. aussi Scherer and Ross (1990, 251-260), qui donnent des exemples détaillés de leadership de prix dans les secteurs suivants aux Etats-Unis : cigarettes, acier, automobiles, céréales prêtes à consommer, turbogénérateurs et essence.

10. On pourrait même avancer que les entreprises préfèrent des solutions moins risquées et plus souples à une collusion explicite. C'est une interprétation possible des résultats publiés par Fraas et Greer (1977). D'après la Nouvelle-Zélande (1999) :

> …selon une analyse de 606 cas de fixation illégales des prix aux Etats-Unis, [Fraas et Greer] se sont aperçus que les plus grandes fréquences d'activités d'entente se produisent sur des marchés comptant environ quatre à dix entreprises. A moins de quatre entreprises, l'activité d'entente est relativement faible parce que la collusion tacite ou la domination d'une seule entreprise prévalent alors.

11. Yao et DeSanti (1993, 117) citent l'explication par le Juge Breyer de la raison pour laquelle le parallélisme conscient et le leadership de prix ne sont généralement pas interdits : "ce n'est pas parce que ces prix sont désirables (ils ne le sont pas), mais parce qu'il est pratiquement impossible d'imaginer un remède applicable sur le plan judiciaire aux prix "interdépendants". Comment imposer à une entreprise de fixer ses prix sans tenir compte des réactions probables de ses concurrents ?". Le même jugement a apparemment été porté dans d'autres juridictions. Whish (1993, 281) faisant référence à la décision de la Cour de justice des Communautés européennes rendue en 1979 dans l'affaire *Hoffmann-La Roche c. Commission*, précise :

> Ce rejet apparent de l'article 86 [qui interdit l'abus de position dominante par un groupe d'entreprises ainsi que par une seule entreprise] comme moyen de contrôler un comportement oligopoliste était le bienvenu. De toute façon, les membres d'un oligopole qui se lancent dans une collusion tombent sous le coup de l'article 85. Lorsque les participants à un oligopole se comportent de façon identique du fait de la structure du marché sur laquelle ils opèrent, il n'y a pas lieu de les condamner pour abus de position si leur conduite est un comportement rationnel non collusif, éventuellement même inévitable.

12. Viscusi et al. (1995, 131-132) considèrent que Williamson (1975, 246) reflète le point de vue de la plupart des économistes lorsqu'il relève qu'une interaction coordonnée allant moins loin qu'une collusion explicite réussit rarement et en conséquence que : "sauf dans des secteurs fortement concentrés qui produisent des produits homogènes, qui comportent de fortes barrières à l'entrée et qui sont parvenus à maturité, l'interdépendance oligopolistique ne risque pas de poser des problèmes antitrust que seule résoudrait une dissolution".

13. Pour un bon exposé de l'apport de la théorie des jeux et de la nouvelle économie industrielle à la compréhension des facteurs ayant une incidence sur une interaction coordonnée, cf. Kantzenbach et al. (1995).

14. Dans une étude sur l'évaluation des fusions sur les marchés oligopolistes demandée par l' Office of Fair Trading du Royaume-Uni, on peut lire : "… les conditions d'une hausse de prix coordonnée réussie après une fusion sont les mêmes que les conditions nécessaires à la réussite d'une entente, que la collusion redoutée après la fusion soit explicite ou tacite". NERA (1998, 7)

15. Etats-Unis (1997, section 2.1), italiques ajoutées. Cf. aussi Australie (1996, 42), où il est indiqué que lorsque le nombre d'entreprises diminue, il y a davantage de possibilités de conduite coordonnée "y compris de collusion explicite et implicite" parce que "il devient plus facile de parvenir à un accord sur les conditions d'une actions coordonnée, de signaler ses intentions aux autres participants au marché et de surveiller les comportements".

16. La collusion a été définie comme "… les activités menées par des entreprises restreignant la concurrence dans le but d'obtenir des avantages collectifs, que ces activités s'inscrivent ou non dans le cadre d'un accord explicite conclu entre ces entreprises". Kantzenbach et al. (1995, 10)

17. Kantzenbach et al. (1995, 72-73)

18. Il est également clairement précisé dans Kantzenbach et al. (1995, 6) : "On ne peut se faire une idée correcte de la probabilité d'une collusion sur le marché étudié que si l'on a pris en considération tous les niveaux et tous les facteurs collectivement".

19. Cette remarque est d'autant plus vraie si les entreprises participant à une collusion explicite préfèrent se rencontrer deux à deux pour rendre encore plus difficile la preuve de l'existence d'une collusion.

20. Pour un examen plus détaillé de l'importance du nombre des entreprises dominantes et de leur part de marché totale, cf. Stigler (1964); Scherer et Ross (1990, 277-278); et NERA (1998,7).

21. L'indice HHI est une moyenne pondérée des parts de marché de tous les participants au marché en prenant la part de marché comme facteur de pondération.

22. Cela apparaît dans une comparaison des Directives américaines sur les fusions avec ses prédécesseurs. James (1993, 449) a fait remarquer qu'outre l'abandon d'une application mécanique des données relatives à la concentration, les Directives de 1992

> ...établissent un lien très clair entre la concentration et l'analyse des effets concurrentiels… la concentration ne sert plus de référence par rapport à laquelle d'autres éléments de preuve sont évalués ; au contraire, la concentration n'est que l'une des composantes (certes importante) d'un cadre analytique intégré qui cherche à déterminer la mesure dans laquelle une fusion est susceptible d'avoir une incidence sur la concurrence sur le marché en cause.

Plus loin, James (452) ajoute :

> Dans les Directives de 1992, l'analyse des effets sur la concurrence envisage une évaluation détaillée des incitations d'une entreprise au regard de la concentration et d'autres caractéristiques du marché. Dans l'analyse des effets coordonnés potentiels, par exemple, il n'est pas correct d'affirmer qu'une concentration rend probables des effets anticoncurrentiels, puis d'examiner si d'autres caractéristiques du marché rendent ces effets plus ou moins probables ou plus ou moins puissants. Au contraire, dans une bonne analyse menée conformément aux Directives, on regarde la probabilité avec laquelle la concentration ainsi que d'autres facteurs pris de façon combinée influent, après la fusion, sur le fait que les entreprises parviennent à s'entendre, repèrent des écarts par rapport aux modalités convenues et sanctionnent les tricheurs. Si l'on mène l'analyse d'une autre manière, on est automatiquement conduit à faire de la concentration le facteur clé de probabilité d'un effet anticoncurrentiel et à ramener à tort l'analyse de la fusion, une fois la concentration mesurée, à un critère à un seul niveau.

Cela ne signifie pas, comme Yao et Arquit (1992, 17-18) s'efforcent de le souligner, que la concentration ne joue plus un rôle important dans l'évaluation de la probabilité d'une interaction coordonnée. Certains auteurs sont convaincus que la tendance à une approche plus analytique et moins structurelle n'a pas encore été suffisamment loin aux Etats-Unis. Cf. Werden et Froeb (1996, 67-68).

23. Pour des exemples de garde-fous fondés sur des indices de concentration, cf. Canada (1991:21), Australie (1996:42-43) et Etats-Unis (1997, section 1.51).

24. C'est là une autre bonne raison pour laquelle il faudrait que les services de la concurrence coopèrent dans l'échange d'informations non confidentielles concernant la mise en œuvre des réglementations.

25. La Cour de justice des Communautés européennes a fait référence à ce point lorsqu'elle a minimisé la preuve apportée par la Commission du comportement passé dans l'affaire *Kali & Salz ;* Cf. Venit (1998, 1132). Cette affaire importante est largement décrite dans les deux annexes au présent document.

26. Etats-Unis (1997, section 2.1). Cf. aussi Australie (1996, 54-55)

27. Cf. Kantzenbach et al. (1995, 15-16).

28. Cf. Etats-Unis (1997, section 2.11) et Australie (1996, 55).

29. NERA (1998, 57) Scherer et Ross (1990, 222), Yao et Arquit (1992, 18), et Ginsberg (1993) expriment des points de vues similaires. Yao et Arquit remarquent également que l'homogénéité des produits renforce la capacité des entreprises à découvrir et punir la tricherie.

30. Cf. Scherer et Ross (1990, 239-244)

31. Venit (1998, 1128) fait le commentaire suivant :

> Une forte élasticité-prix de la fonction de demande de prix d'une entreprise signifie que même une petite concession sur les prix suffit à permettre à l'entreprise de vendre une beaucoup plus grande quantité de sa production. En particulier lorsque la capacité est sous-utilisée, cela constitue une forte incitation à tricher. Dans l'affaire *Pilkington-Techint/SIV*, la Commission s'est appuyée sur ce facteur et a considéré qu'une collusion était improbable compte tenu de la forte élasticité-prix de la demande des fonctions prix-demande.

32. Cf. Scherer et Ross (1990, 236). Apparemment, ce livre « faisait la moitié de l'épaisseur de l'annuaire téléphonique de Manhattan ».

33. Dans les Directives américaines sur les fusions, on peut lire : « l'homogénéité des produits ou des entreprises et des pratiques existantes entre les entreprises… telles que la normalisation de la fixation des prix ou des variables de produits sur lesquelles les entreprises peuvent se faire concurrence facilitent sans doute la réalisation d'une action coordonnée ». Etats-Unis (1997, section 2.11)

34. Cf. Kantzenbach et al. (1995, 47-49)

35. Cf. Scherer et Ross (1990, 238-239).

36. Les Directives australiennes et allemandes sur les fusions font état aussi des différences d'intégration verticale. Cf. Australie (1996, 55) et Allemagne (1989, 26).

37. Cf. Kantzenbach et al. (1995, 60).

38. C'est un aspect d'une plus large remarque bien exprimée par Kantzenbach et al. (1995, 74) :

> Plus la valeur accordée aux gains futurs potentiels est grande, plus une entreprise est intéressée par un comportement collusoire destiné à améliorer et stabiliser sa profitabilité à long terme. Entre-temps, l'entreprise est moins tentée d'améliorer ses propres profits à court terme en trichant. C'est pourquoi, il est très important d'apprécier les horizons de planification des entreprises lorsqu'on porte un jugement sur la probabilité d'une collusion.

39. Etats-Unis (1997, section 2.12). Les Directives australiennes sur les fusions examinent aussi si un concurrent exclu par une fusion est une entreprise qui « … a joué un rôle important dans le maintien d'un marché concurrentiel, c'est-à-dire en contrant toute tentative de coordonner un comportement sur le marché ». Australie (1996:43, voir aussi § 5.132, p. 50).

40. Allemagne (1989, 26-27). Les Directives australiennes sur les fusions sont également nuancées sur ce point :

> Des parts de marché plus égales peuvent accroître la communauté d'intérêts entre les participants au marché dans certaines circonstances. Dans d'autres cas, l'apparition d'une entreprise détenant une forte part de marché peut accroître la probabilité d'un leadership de prix.

La remarque sur le leadership de prix est à prendre avec précaution car les asymétries de parts de marché ne figurent pas dans la liste des cinq facteurs apparemment suggérés par Markham comme susceptibles d'accroître la probabilité d'un leadership de prix collusoire. Cf. Scherer et Ross (1990, 249).

41. D'après Scherer et Ross (1990, 290), « …la probabilité d'un éclatement de la discipline des prix augmente avec le poids des coûts fixes supportés par les vendeurs, mais la prise de conscience de ce risque peut stimuler des adaptations institutionnelles venant annuler cette tendance ».

42. Le niveau minimal est déterminé par le point où une entreprise dominante commence par rapport au point minimal de sa courbe de coût marginal (c'est-à-dire les coûts marginaux vont-ils augmenter ou diminuer si l'entreprise augmente sa production ?), et par la pente plus ou moins marquée de sa courbe de coût marginal.

43. D'après les Lignes directrices du Canada concernant les fusionnements :

> … on entend par transparence la disponibilité immédiate de renseignements sur les concurrents : prix, niveaux de service, initiatives en matière d'innovation, qualité et variété des produits, niveaux de publicité, etc. En général, un comportement coordonné devient d'autant plus difficile que le degré de transparence sur le marché diminue parce que les entreprises peuvent plus difficilement déceler les remises secrètes et autres dérogations aux conditions d'interdépendance et y réagir.

Canada (1991, 40).

44. OCDE (1998c, p. 10, §. 45)

45. La note de référence de l'OCDE (1998b) examine ces points ainsi que d'autres aspects de la politique de la concurrence en ce qu'elle concerne la propriété intellectuelle.

46. Cf. OCDE (1998b), en particulier la note de référence de Willard Tom.

47. Cf. aussi Scherer et Ross (1990, 280-281 et 285-286) et Allemagne (1989, 18)

48. Carlton et Perloff (1990, 227) confirment cette remarque en la nuançant :

> Il peut être difficile de repérer une tricherie du fait de fluctuations aléatoires des coûts de la demande ou de l'offre. Toutefois, les ententes ont la possibilité de modifier leurs modes de sanction pour éviter la tricherie, même en cas de chocs aléatoires.

Ce commentaire s'appuie sur une référence à Green et Porter (1984).

49. Pour une analyse de l'importance de commandes peu fréquentes et portant sur de gros volumes dans le contexte d'une évaluation de la probabilité qu'une fusion facilite une interaction coordonnée, se reporter à Etats-Unis (1997, section 2.12), Australie (1996, 55) et Allemagne (1989, 29). Dans un contexte plus général, Scherer et Ross (1990, 306) mentionnent aussi l'importance de commandes peu fréquentes et portant sur de gros volumes. Cf. aussi OCDE (1998c:9), où la diminution de la fréquence des achats est citée comme moyen de stimuler la concurrence dans le cadre des marchés publics.

50. Cf. Yao et Desanti (1993:128), qui citent l'extrait suivant d'une déclaration du Department of Justice :

> Des hausses de prix souhaitées par certaines compagnies aériennes sont échangées contre des hausses souhaitées par d'autres sur des marchés différents. Cela concerne souvent de grandes plates-formes de correspondance. Chaque compagnie aérienne a tendance à préférer des tarifs plus élevés sur les itinéraires desservis par ses plates-formes, où elle détient en général une forte part de marché et tire les profits les plus élevés. Ainsi, une compagnie aérienne peut être disposée à monter ses prix au-delà de ce qu'elle préférerait sur des itinéraires desservant les plates-formes d'autres compagnies de façon à s'assurer que ces autres compagnies appliquent à leur tour les tarifs plus élevés qu'elle souhaite sur les itinéraires desservis par sa propre plate-forme.

51. NERA (1998:33) explique pour sa part :

> En raison de la complexité des effets d'une action coordonnée, il ne suffit pas d'adopter une simple approche de vérification ou de notation d'une liste d'éléments ; il faut plutôt procéder à une analyse attentive de chacun des facteurs ayant une incidence sur la probabilité d'une collusion. Chacun de ces facteurs a une importance différente selon le cas, et parfois certains facteurs peuvent se prêter à une analyse quantitative (par exemple, une mesure de la volatilité de la demande globale). En outre, dans certains cas, même si plusieurs des conditions d'une collusion sont remplies, une action coordonnée reste impossible si l'une des caractéristiques structurelles ou comportementales du marché risque de déstabiliser un comportement concerté.

Dans son résumé de l'impact des « conditions de la concurrence » (par opposition au « processus de concurrence » évoqué plus brièvement) sur la domination du marché par un oligopole, la liste allemande pour les procédures de contrôle des fusions stipule :

> Même si une analyse des conditions pertinentes de la concurrence indique que toutes ne témoignent pas d'une domination du marché par un oligopole, ce peut néanmoins être le cas, et il faut alors procéder à un examen du processus de concurrence. Dans cette analyse, il faut comparer toutes les conditions de la concurrence qui jouent en faveur de cette hypothèse à celles qui vont à l'encontre. A cet égard, il faut évaluer la relation entre les possibilités d'un parallélisme conscient et la probabilité que ce comportement soit effectivement observable. Il faut veiller tout particulièrement aux critères importants de parts de marché et de barrières à l'entrée, car ils sont une condition nécessaire d'un comportement parallèle. Plus il est probable qu'un comportement parallèle apparaisse sur la base de ces critères, plus il faut trouver de preuves pour réfuter cette hypothèse. Les relations croisées ainsi que la phase de développement du marché constituent aussi des critères importants.

Allemagne (1989:30).

52. Etats-Unis (1997, section 2.1, italiques ajoutées). Se reporter aussi à la section 0.1 de ces Directives concernant les fusions qui traite d'un point connexe. En outre, après avoir cité Rule et Meyer (1990), Winckler et Hansen (1993:793) concluent : « … l'objectif de la politique américaine en matière de fusion est d'éviter que la concentration du marché n'évolue vers un comportement anticoncurrentiel qui ne relève pas des structures comportementales du Sherman Act » (793)

53. Dans une récente critique de la réglementation de la concurrence de l'UE concernant les accords anticoncurrentiels, on peut lire dans les conclusions : « …. On pourrait veiller davantage à prendre des mesures préalables pour rendre moins probable une collusion. Le contrôle des fusions peut jouer un rôle important à cet égard, car c'est sans doute le seul instrument qui permette d'agir directement sur la structure d'un secteur. Dans l'analyse des fusions, on pourrait aussi porter une attention toute particulière au risque d'instaurer un environnement sectoriel favorisant une coordination ». Neven et al. (1998:78)

54. Cf. Australie (1996:41-44); Canada (1991:3-4); et Allemagne (1989:23)

55. La normalisation peut aussi voir un effet anticoncurrentiel comme lorsqu'elle permet à une entreprise ou à un petit groupe d'entreprises de contrôler les nouvelles entrées. C'est ce qui peut se passer, par exemple, lorsque la normalisation exige l'accès aux droits de propriété intellectuelle d'une ou de plusieurs entreprises.

56 . En se fondant surtout sur l'expérience britannique et américaine, Newbery (1997:1) prétend que « … l'introduction de la concurrence dans des services d'utilité publique organisés en réseau précédemment monopolisés et réglementés est déterminante si l'on veut pleinement tirer les avantages d'une privatisation ». Cf. aussi OCDE (1992), et Australie (1993).

57. Pour un examen des problèmes et des arbitrages en cause, Cf. « Promoting Competition in Sectors with a Non-competitive Component », Note de référence du Secrétariat pour la réunion du 3 mai 1999 du Groupe de travail n°2 du Comité du droit et de la politique de la concurrence de l'OCDE

58. Au Royaume-Uni, le secteur de l'électricité offre de précieux enseignements à cet égard. Les pouvoirs publics ont décidé de créer deux sociétés de production d'électricité d'origine thermique et une troisième, détenue par l'Etat, de production d'électricité d'origine nucléaire, malgré les risques apparents d'interaction coordonnée. Apparemment, un avertissement concernant ces risques avait été donné avant la privatisation ; Cf. C. Robinson, « Competition in Electricity? » (1988) cité dans Australie (1993:224, cf. aussi 222-225 pour un commentaire plus détaillé sur la séparation entre activités concurrentielles et réseaux de monopole naturel). Après avoir étudié la performance du secteur après sa privatisation, Green et Newbery (1997:45) ont conclu qu'il aurait mieux valu avoir cinq au lieu de deux sociétés de production d'électricité classique. Le nombre de « cinq » semble aussi être confirmé par la théorie des jeux. Cf. Philips (1995, chapitre 2).

59. Cf. OCDE (1997) Vol. II, Chapitre 5 (Ouverture internationale des marchés et réforme de la réglementation).

60. Cf. OCDE (1998a). D'après l'expérience des Etats-Unis, la lutte contre les ententes internationales semble constituer une activité en plein développement. De septembre 1996 à septembre 1998, les amendes infligées à des ententes internationales se sont élevées à près de 440 millions de dollars. Ce chiffre était "… pratiquement identique au montant total des amendes prononcées pour l'ensemble des poursuites pénales intentées par la Division pendant les vingt ans qui se sont écoulés entre 1976 et 1995". Melamed (1998:3)

Annexe I.

INTERACTION COORDONNÉE ET POSITION DOMINANTE COLLECTIVE

Certains pays Membres de l'OCDE se fondent sur le critère de la réduction sensible de la concurrence ou sur une variante proche pour se prononcer sur une fusion. Comme on l'a déjà indiqué, les services de la concurrence qui appliquent ce type de critère sont en mesure de bloquer les fusions qui augmentent sensiblement la probabilité d'effets unilatéraux ou d'effets coordonnés. Beaucoup d'autres pays utilisent le critère dit « de domination », c'est-à-dire de création ou de renforcement d'une position dominante. Interprété comme la domination d'une seule entreprise, ce critère permettrait certainement aux services de la concurrence de bloquer des fusions censées être associées à des effets unilatéraux anticoncurrentiels, mais les laisseraient pratiquement impuissants à agir contre des fusions dont l'impact anticoncurrentiel passe par une interaction coordonnée[1].

Un moyen de dépasser les limites d'un critère de domination consisterait à mesurer la domination de façon à tenir pleinement compte de la structure sectorielle au lieu de se fonder principalement sur la part de marché d'une seule entreprise dominante. Une autre manière plus fiable d'arriver au même résultat serait d'élargir le concept de domination de façon à y inclure la domination collective. Pour appliquer cette approche, la plus grande difficulté est de déterminer les « liens » qui doivent exister au sein de la collectivité, et en particulier si un degré élevé d'interdépendance reconnue suffit pour qu'un groupe d'entreprises soit considéré comme se trouvant en situation de domination collective.

Dans le contexte du contrôle des fusions dans l'Union européenne, le point de départ de tout examen de la domination collective est généralement la décision de 1989 de la Commission dans l'affaire *Verre plat italien.* D'après Monti (1996:90), « la Commission a infligé une amende à trois fabricants de verre italiens pour s'être entendus pour pratiquer des prix identiques, appliquer un système de quotas de vente et accorder des remises identiques ». Ces trois fabricants représentaient environ 80 pour cent du marché italien. Agissant au titre de l'article 85, la Commission invoquait également une violation de l'article 86. Le Tribunal de première instance a relevé que la Commission :

> … a appliqué la notion de position dominante collective aux entreprises en question parce que, non seulement elles détenaient collectivement une très grande part du marché, mais encore elles se présentaient sur le marché comme une seule et même entité et non comme des entreprises individuelles. Ce comportement émane non pas de la structure de l'oligopole mais des accords et [des pratiques concertées] qui ont conduit les trois producteurs à instaurer des liens structurels entre eux, tels que, notamment, l'échange systématique de produits. [Cité dans Monti (1996:91].

L'arrêt *Verre plat* italien a donc étendu la domination collective au-delà d'un groupe d'entreprises placées sous un contrôle commun, en prenant en compte des situations dans lesquelles un groupe d'entreprises détenant une forte part de marché collective « se présentait sur le marché comme une seule et même entité ». Selon Winckler et Hansen (1993:802) :

> Dans l'affaire *Verre plat italien,* le Tribunal ... n'a pas admis qu'un parallélisme conscient à lui seul pouvait donner lieu à une position dominante collective. Il faut aussi prouver d'autres facteurs *comportementaux* - l'absence de liens étroits sur le plan économique et juridique. Le Tribunal a certes reconnu que la position dominante peut se manifester dans des situations mettant en cause plusieurs entreprises, mais il a adopté un critère très restrictif, exigeant pratiquement que les liens entre les entités en cause soient si importants que la position dominante, conformément à la définition classique, soit exercée conjointement par les

entreprises. Il n'est même pas évident que le critère retenu exige un constat de structure oligopolistique.

Dans sa décision Nestlé/Perrier de 1992 - c'était la première fois que la Commission s'appuyait sur la notion de domination collective dans le contexte de l'examen d'une fusion - la Commission a semblé moins s'attacher aux relations comportementales ou structurelles entre les parties pour prendre en considération les caractéristiques du marché susceptibles de faciliter une interaction coordonnée après la fusion. Briones Alonso (1993:122) a résumé l'approche de la Commission de la manière suivante :

> En bref, les degrés élevés de concentration ont conduit la Commission à examiner une longue liste de facteurs pour déterminer si le marché se prête à la mise en place d'une collusion tacite ou, comme cela est mentionné dans la décision, « un comportement parallèle anticoncurrentiel ». La plupart des facteurs cités dans la littérature économique ont été pris en considération. Certains, tels que le schéma des commandes ou la sensibilité du secteur à l'utilisation de la capacité, ne sont pas développés explicitement dans la décision.

D'après Briones Alonso, les facteurs qui ont été appliqués par la Commission sont très similaires à ceux qui sont évoqués à la section III du présent document, et qu'on retrouve, explicitement ou implicitement, dans les directives relatives aux fusions adoptées par les pays qui retiennent le critère de la réduction sensible de la concurrence. Ils concernent principalement les caractéristiques d'un oligopole créant une incitation et une capacité à remplacer la concurrence par une action concertée.

Récemment, dans sa décision relative à la fusion *Kali & Salz* (voir l'annexe II pour plus de détails), la Cour de justice des Communautés européennes a jugé que la réglementation de l'Union européenne en matière de fusions s'applique effectivement à une position dominante collective. Plus précisément, la Cour a précisé que lorsqu'une fusion crée ou renforce prétendument une position dominante collective et, ainsi, fait sensiblement obstacle à la concurrence,

> … la Commission est donc tenue d'apprécier, selon une analyse prospective du marché de référence, si l'opération de concentration…. aboutit à une situation dans laquelle une concurrence effective dans le marché en cause est entravée de manière significative par les entreprises parties à la concentration et une ou plusieurs entreprises tierces qui ont, ensemble, notamment en raison des facteurs de corrélation existant entre elles, le pouvoir d'adopter une même ligne d'action sur le marché et d'agir dans une mesure appréciable indépendamment des autres concurrents, de leur clientèle et, finalement, des consommateurs (§ 221 de l'arrêt).

Venit (1998:1108) souligne qu'une partie importante de l'argumentation de la Commission contre cette fusion portait sur différents liens entre l'entité fusionnée et son principal concurrent, à savoir SCPA en France:

> D'après la Commission, les liens commerciaux suivants entre K&S et SCPA rendaient peu probable l'existence d'une concurrence entre ces deux entités après leur fusion :
>
> - K&S et SCPA participaient à l'entente autrichienne d'exportation, Kali-Export GmbH, dans laquelle chacune des composantes - K&S, MdK, SCPAet Coposa (société espagnole) - détenait 25 pour cent des parts ;
>
> - K&S et EMC/SCPA détenaient chacune 50 pour cent du capital du producteur de potasse canadien, Potocan ; et
>
> - SCPA était le distributeur de K&S en France.

La Cour a longuement commenté la question de savoir s'il était suffisant d'examiner les liens entre les entreprises pour identifier et établir une position dominante collective. Venit (1998:1115-1116) a déduit de ce jugement :

> Il est loin d'être clair que des liens autres qu'économiques soient nécessaires ou suffisants pour établir l'existence d'un risque sérieux de collusion … Dans la mesure où l'existence ou la non-existence de liens comportementaux n'est pas pertinente d'un point de vue économique, la Cour a rendu un grand service à la Commission en la libérant des contraintes qui auraient pu autrement être imposées par sa jurisprudence concernant l'article 86.

Venit (1998:1133) ajoute :

> ... la Cour a rejeté l'importance des liens structurels sur lesquels la Commission s'était si fortement appuyée dans sa décision *Kali & Salz.* La Cour a fait savoir ainsi qu'à eux seuls des liens structurels ne sont pas *suffisants* pour créer un risque de domination oligopolistique. L'arrêt de la Cour n'a pas abordé le point de savoir si des liens structurels sont *nécessaires* pour conclure à l'existence d'une domination oligopolistique. *Cependant, l'importance conférée par la Cour à l'interdépendance laisse penser que des liens structurels ne sont probablement même pas nécessaires* [italiques ajoutées]. Néanmoins, lorsqu'ils existent, des liens structurels et des engagements mutuels peuvent, dans des circonstances appropriées, être des facteurs importants de renforcement de la probabilité d'une collusion. De tels liens peuvent jouer un grand rôle parce qu'ils compensent l'absence de transparence naturelle dans les conditions du marché. Toutefois, ils peuvent revêtir différentes formes, telles que des contacts répétés entre les mêmes acteurs qui tendent à réduire l'incertitude et à leur permettre de mieux comprendre leurs stratégies concurrentielles respectives.

Si Venit a raison, l'application d'un critère fondé sur la domination collective doit être très semblable à celle du critère de réduction sensible de la concurrence pour interdire les fusions qui accroissent la probabilité d'une interaction coordonnée dans un contexte d'oligopole. Cela ne signifie pas pour autant que les deux critères sont aussi faciles à démontrer et à appliquer en justice.

NOTE

1. C'est le point de vue exprimé par l'Australian Trade Practices Commission (maintenant dénommée Australian Competition and Consumer Commission) au cours du débat qui a abouti à la réadoption du critère de réduction sensible de la concurrence au lieu du critère de la position dominante d'une seule entreprise. Cf. Williams (1993:83).

Annexe II

EXEMPLES

1. Affaires ne concernant pas une fusion

Après avoir brièvement évoqué un certain nombre de secteurs caractérisés aux États-Unis par des ratios élevés de coûts fixes sur coûts variables - chemins de fer, fabrication de rayonne, ciment, acier, équipement électrique lourd, extraction pétrolière et raffinage - Scherer et Ross (1990:293) résument ainsi la situation :

> … certains secteurs (comme le secteur de l'acier aux États-Unis jusqu'en 1968 et le secteur pétrolier dans le monde jusqu'en 1984) ont très bien réussi à minimiser les batailles de prix malgré des coûts fixes élevés et des coûts variables faibles et une demande déprimée ; certains n'ont réussi que lorsque les pressions financières exercées sur leurs membres n'étaient pas fortes ; et certains n'ont pas réussi même après s'être engagés dans une collusion. Ces différences s'expliquent en grande partie par la présence ou l'absence d'autres conditions propices à une coopération pour la fixation des prix. Lorsque d'autres facteurs tels que la répartition des entreprises par taille, le degré d'homogénéité des produits, la mesure dans laquelle le leader pour la fixation de prix est reconnu, la capacité et la volonté des producteurs de constituer des stocks importants et l'habileté à éviter des poursuites antitrust sont favorables, une discipline de prix peut être maintenue malgré des coûts fixes élevés. Lorsqu'ils sont défavorables, l'existence de coûts fixes très lourds rend d'autant plus probable une fixation indépendante des prix, surtout en période de mauvaise conjoncture. Seule une analyse statistique permet de donner avec certitude le résultat net de ces tendances… il est clair qu'une forte intensité de capital se solde en moyenne par un moindre rendement, ce qui témoigne probablement d'une discipline plus fragile en matière de fixation des prix. Cependant, l'effet négatif de l'intensité de capital sur les profits se trouve nuancé dans une certaine mesure lorsque la concentration du marché est particulièrement forte.

D'après les actions intentées par la Commission européenne, Neven et al. (1998:73-74) font des remarques analogues :

> Dans un certain nombre d'affaires récentes, il y a tout lieu de penser que les caractéristiques du secteur ont rendu particulièrement intéressant l'exercice collectif du pouvoir de marché et qu'une coordination explicite était aussi probablement nécessaire. De fait, on relève des similitudes frappantes dans un certain nombre d'affaires récentes, en ce qui concerne les caractéristiques du secteur. Les affaires comme *Polypropylene, Verre plat, PVC, LEDP, Pâte de bois, Acier soudé* et, dans une moindre mesure *Carbonate de soude* concernent des secteurs où il y a des capacités excédentaires pendant une longue période, où les coûts fixes sont élevés et où le coût marginal augmente rapidement dès lors que l'utilisation des capacités diminue. En ce qui concerne la demande, son élasticité-prix est relativement faible, mais les produits sont soit homogènes (Pâte de bois, Acier soudé ou Carbonate de soude) soit différenciés mais fortement normalisés et vendus par plusieurs entreprises (Verre plat), de sorte que, dans tous ces cas, l'élasticité de la demande au niveau de l'entreprise est normalement très forte. Dans certains secteurs (pâte de bois ou verre plat pour l'automobile), la concentration des acheteurs peut aussi contribuer à ces fortes élasticités.

Ces caractéristiques influent sur les perspectives d'exercice d'un pouvoir de marché : premièrement, le degré élevé de transparence du marché, qui résulte de la normalisation des produits et de la concentration des acheteurs et des vendeurs, est de nature à améliorer la détection d'éventuels écarts. La probabilité qu'une certaine forme d'exercice d'un pouvoir de marché puisse être établie se trouve alors renforcée. Deuxièmement, en présence de capacités excédentaires, il n'y a guère de menace d'entrée. Troisièmement, l'incitation à rechercher un certain pouvoir de marché est très forte dans ces secteurs, en particulier après un choc négatif sur la demande qui influe sensiblement sur les profits compte tenu de la rigidité de la structure de production… Comme la demande globale est inélastique, il est possible de faire monter les prix de façon relativement importante sans réduire de beaucoup la production globale. On remarquera toutefois que l'incitation à ne pas respecter "l'accord" est également forte du fait de la forme de la fonction de coût. En d'autres termes, la récompense liée à une réduction de la production, de même que l'incitation à ne pas se conformer au résultat qu'aurait donné la collusion, se trouvent renforcées par les caractéristiques du secteur. Les circonstances sont donc telles qu'on pourrait s'attendre, en tous cas en théorie, à un grand nombre de tentatives d'action coordonnée, et à un grand nombre d'échecs. Ce sont généralement les circonstances dans lesquelles les entreprises recourent à une forme de coordination explicite.

2. Affaires de fusion

Dans un récent discours, un responsable de la Federal Trade Commission des États-Unis a évoqué un certain nombre d'importantes affaires de fusion en mettant l'accent notamment sur l'interaction coordonnée. L'une de ces fusions était la vente de l'activité mondiale de peroxyde d'hydrogène de DuPont à Degussa. Le marché était concentré (HHI de 2000, passant à 2500 après la fusion), l'entrée était difficile et les prix complètement inélastiques par rapport à la demande du marché. Parker (1998,8) a attiré l'attention sur quelques autres facteurs qui, malgré l'influence éventuellement modératrice de quelques gros acheteurs, ont conduit la FTC à exiger que certains changements soient apportés à la fusion avant de l'autoriser :

> Premièrement, le peroxyde d'hydrogène est un produit extrêmement homogène qui est acheté principalement sur la base du prix. Il est donc plus facile de s'entendre sur le prix, et il est aussi plus facile de repérer toute tricherie. Deuxièmement, les producteurs ont accès à des informations fiables sur les prix du fait de l'application de prix livraison comprise, de la pratique de l'annonce préalable des hausses de prix et d'accords avec les clients, comportant notamment une clause « alignement ou non-obligation d'achat ». Dès lors, les entreprises disposent d'une bonne information sur ce que font leurs concurrents et ce qu'ils envisagent de faire en ce qui concerne les prix.
>
> Troisièmement, il y a eu une collusion explicite entre producteurs de peroxyde d'hydrogène en Europe du début des années 1960 jusqu'à la fin des années 1970. Les entreprises en cause étaient des producteurs qui, après l'acquisition, se retrouveraient les principaux fournisseurs en Amérique du nord.
>
> Quatrièmement, il existe dans ce secteur des pratiques de nature à faciliter une interdépendance et une coordination sur un marché concentré. Par exemple, les producteurs se vendent des produits assez régulièrement. Parfois, ces ventes semblent avoir pour objet d'éviter des conflits concurrentiels entre producteurs.
>
> Cinquièmement, les producteurs ont su maintenir d'importants différentiels de prix entre les différents usages du produit, même si celui-ci est fondamentalement le même quant à ses caractéristiques de performances. Cela indique au moins deux choses : la capacité de coordonner les prix, et l'incapacité d'opérer un arbitrage pour supprimer les différentiels de prix.

> Enfin, la société projetait une hausse de prix à la suite de l'acquisition envisagée. D'une manière générale, cet élément témoigne aussi bien d'effets unilatéraux que d'une collusion, mais ici les conditions structurelles laissent penser qu'une collusion est l'issue la plus probable.

Une autre des fusions décrites par Parker concerne un marché caractérisé par une forte différenciation des produits. Il s'agit de l'entreprise conjointe Exxon/Royal Dutch Shell pour l'additif d'huiles pour moteurs "V" destiné à améliorer l'indice de viscosité. L'opération aurait réduit le nombre de producteurs commerciaux de quatre à trois, et pire encore, l'un des producteurs était intégré verticalement à 100 pour cent, c'est-à-dire qu'il vendait à un acheteur captif. Comme Exxon et Shell auraient assuré à eux deux plus de 50 pour cent des ventes commerciales en Amérique du nord, il y avait nettement un risque d'effets unilatéraux, mais les faits indiquaient aussi un risque encore plus grand d'interaction concertée. On sait qu'une différenciation des produits réduit le risque de hausse de prix concertée, mais il reste encore le risque que les entreprises fassent peser effectivement sur les clients le même effet final sur les prix. En tout cas, Parker (1998:9) remarque :

> Plusieurs facteurs indiquaient qu'une collusion réussirait. Premièrement, la demande d'additif VI est fortement inélastique. Cet additif est indispensable pour répondre aux normes relatives aux huiles pour moteurs, et il n'existe pas de substitut économique. En outre, il représente moins de 10 pour cent du coût total de l'huile pour moteurs. En conséquence, les clients sont insensibles aux prix, et les fournisseurs sont fortement incités à s'entendre. Deuxièmement, comme on peut s'y attendre lorsque des produits sont différenciés, il existe une fidélité à la marque. Les producteurs d'huiles pour moteurs conçoivent et commercialisent leurs produits sur la base des caractéristiques d'un additif VI particulier, et tout changement de la formule exigerait de nouveaux essais et de nouveaux tests de qualification pour respecter les exigences des constructeurs automobiles. Ainsi, changer de marque entraînerait des coûts importants et prendrait du temps. Finalement, les fabricants d'huiles pour moteurs hésitent à changer de fournisseur en réaction à une faible augmentation de prix.
>
> Troisièmement, l'entreprise conjointe envisagée aurait facilité une action concertée en augmentant l'homogénéité de l'offre de produits des entreprises en cause. Les producteurs d'huiles pour moteurs achètent non seulement des additifs VI, mais aussi d'autres additifs, notamment des produits associés dispersant/inhibiteur (DI). Avant la constitution de l'entreprise conjointe, un fournisseur d'additifs VI ne proposait pas de DI, et un fournisseur de DI ne vendait pas d'additif VI. Après la création de l'entreprise conjointe, les trois fournisseurs allaient vendre les deux produits et auraient le même intérêt à maximiser la rentabilité totale de toute la gamme d'additifs. En conséquence, il aurait été plus facile à ces fournisseurs de coordonner leur comportement et plus difficile aux clients de faire leur choix.

De ces affaires de fusion, auxquelles s'ajoute une entreprise conjointe combinant les activités de raffinage et de commercialisation de Shell et de Texaco, Parker (1998,9-10) tire quelques grandes leçons :

> Premièrement, la théorie de l'interaction coordonnée existe bel et bien et [la FTC] l'appliquera le cas échéant. Deuxièmement, il n'existe pas de liste type de critères que [la FTC applique] aux cas d'interaction coordonnée. Certains cas sont plus évidents que d'autres, mais les cas difficiles ne sont pas pour autant tolérés. Troisièmement, les fusions aboutissant à la constitution d'une entreprise dominante détenant une très forte part de marché ne sont pas toujours contestées au titre de la théorie des effets unilatéraux ; [la FTC] alléguera des effets coordonnées lorsque les faits le permettront.
>
> Enfin, le simple fait que des produits soient différenciés, comme dans l'affaire Exxon/Royal Dutch Shell, ne signifie pas qu'une théorie de la coordination ne s'appliquera pas. La

différenciation peut empêcher une interaction coordonnée dans la mesure où la concurrence est multidimensionnelle. Toutefois, la différenciation empêche la coordination dans une certaine mesure, par exemple lorsqu'il n'existe qu'un petit nombre de grandes entreprises qui contrôlent la grande majorité de la part de marché. La coordination n'a pas besoin d'être parfaite ou complète, et elle n'a pas non plus à couvrir toutes les conditions de la concurrence. Par exemple, dans l'affaire Exxon/Royal Dutch Shell, le problème était que les entreprises pouvaient éviter les complications d'une coordination du prix en se répartissant les marchés. En outre, la différenciation peut faciliter la coordination de deux manières. Premièrement, même sur un marché comptant un grand nombre de concurrents, une différenciation peut se solder par l'existence sur le marché de plusieurs marques qui se font étroitement concurrence entre elles, mais pas avec d'autres marques. S'il existe une forte préférence du consommateur pour une ou deux marques seulement, seules les entreprises produisant des substituts très proches ont besoin de coordonner leur action. Deuxièmement, lorsque la différenciation se fonde sur une forte préférence du consommateur, l'entrée peut être particulièrement difficile et coûteuse, empêchant les concurrents de prendre des parts de marché, soit en entrant sur le marché, soit en se repositionnant.

Aux États-Unis, les autorités antitrust se penchent sur un certain nombre de facteurs pour estimer la probabilité d'une interaction coordonnée dans les affaires de fusion ; la Commission européenne en fait tout autant. Par exemple, d'après Briones Alonso (1993:119-121), dans l'affaire *Nestlé/Perrier*, la Commission européenne a examiné les facteurs suivants :

(1) le degré élevé de concentration de l'offre (nombre de fournisseurs nationaux ramené de trois à deux) ;

(2) la transparence du marché (prix, quantité vendue et capacité de surveiller le comportement des concurrents) - « la transparence n'est pas seulement considérée dans la décision de la Commission comme un facteur facilitant une collusion tacite, mais aussi comme un moyen de « surveiller » cette collusion » ;

(3) les similitudes de coûts, de capacité et de parts de marché entre les deux principaux acteurs restants, auxquelles s'ajoute le fait qu'ils étaient tous deux actifs dans le secteur plus vaste de l'agroalimentaire et coopéraient déjà dans certaines branches de celui-ci, créaient une communauté d'intérêts qui, d'après la Commission, « … allait faciliter des attitudes de coopération ». Le fait que les deux mêmes sociétés avaient conjointement fait en sorte d'empêcher un tiers de racheter Perrier est une autre preuve de cette coopération ;

(4) demande inélastique par rapport au prix ;

(5) maturité technologique - à cet égard, Briones Alonso précise : "un rythme rapide d'innovation et de changement technologique tend à éroder les positions acquises sur le marché, accroît l'incertitude et suscite des attentes très différentes dans chaque entreprise. Une collusion tacite est réalisée avec moins de difficultés lorsque ce facteur de déstabilisation est absent" ;

(6) faible capacité des autres entreprises sur le marché à limiter des comportements anticoncurrentiels ; et

(7) preuve d'échecs passés de tentative d'entrée dans le secteur du fait de barrières considérables à l'entrée.

La Commission a autorisé la fusion Nestlé, mais seulement après quelques désinvestissements destinés à aider à créer un nouveau concurrent, et avec quelques contraintes de comportement destinées à réduire la transparence du marché ; Cf. Winckler et Hansen (1993:813-815).

En 1998, la Cour de justice des Communautés européennes a rendu un arrêt concernant l'acquisition par Kali & Salz ("K&S"), filiale de BASF pour la production de potasse, du producteur de potasse d'Allemagne orientale Mitteldeutsche Kali AG ("MdK"). Cette fusion intervenait sur un marché extrêmement concentré, transparent et mature (c'est-à-dire faible progrès technologique). D'après Venit (1998,1134) :

> La Cour a, en décidant que le règlement concernant les fusions s'applique à la domination oligopolistique, en admettant que le critère à cet égard, conformément à ce règlement, n'est pas imposé par la jurisprudence de la Cour relative à l'article 86, et en insistant sur la nécessité de procéder à une évaluation économique attentive et dynamique, au cas par cas, au lieu de s'en remettre à une liste systématique de critères descriptifs, a reconnu toute la complexité résultant de la nécessité de procéder à une analyse économique rigoureuse dans les affaires de fusion. De fait, dans son arrêt, la Cour a affirmé la large portée du règlement concernant les fusions tout en imposant à la Commission une norme de preuve plus rigoureuse que celle qui a été appliquée dans sa décision *Kali & Salz*. A ce titre, cet arrêt devrait encore inciter davantage à procéder à une analyse économique plus poussée dans les affaires de fusion.
>
> Le lecteur se reportera à l'Annexe I pour un exposé plus détaillé de l'affaire *Kali & Salz*.

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SECRETARIAT SUGGESTED QUESTIONS FOR DELEGATES SUBMISSIONS*

Countries are invited to write on any or all of the following issues. Whatever the scope of submission chosen, countries are particularly encouraged to provide good case examples illustrating the analysis they generally apply, and commentary as to the perceived effectiveness of their approach.

1. Using prohibitions on horizontal agreements to attack coordinated pricing or other behaviour harming consumers

- countries are encouraged to discuss cases illustrating:

  a. the kinds of circumstantial evidence that courts are most likely to accept as proof that firms have agreed not to compete;

  b. the treatment of anticompetitive oligopolistic behaviours;

- to what extent can such conduct be controlled through prohibition of anticompetitive horizontal agreements?

- what has been your agency's experience in applying concepts of "tacit collusion" (see for example the EU's Wood Pulp case), and "conscious parallelism" in trying to curb anticompetitive oligopolistic behaviours?

- if anticompetitive oligopolistic conduct short of explicit collusion can be curbed using your horizontal agreement provisions, what remedies are available and what has been your agency's experience with them?

  c. the application of prohibitions on anticompetitive horizontal agreements to outlaw "facilitating practices", i.e. practices which tend to make it easier for firms to: reach agreements or otherwise coordinate their behaviour in an anticompetitive manner; detect divergence from such agreements/coordination; and punish such divergence.

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* These questions are excerpted from pre-roundtable guidance provided to Members to assist in the preparation of their written submissions. They are reprinted here because some of the submissions included in this publication make reference to them.

2. Applying prohibitions of "monopolising behaviour" or abuse of dominance in order to attack coordinated pricing or other behaviour harming consumers

- countries might particularly wish to discuss/identify:

a. the factors and analysis employed in order to demonstrate that a group of firms is jointly/collectively dominant and therefore subject to your country's abuse of dominance prohibitions;

b. direct abuses of a jointly/collectively dominant position which are prohibited under their competition law, and what particular problems or successes they have experienced in applying those provisions; and

c. "facilitating practices" by actual or potentially dominant firms, including groups of firms enjoying a joint/collective dominant position, which can be prohibited as abuses of dominance under their competition law, and again, what particular problems or successes they have experienced in applying those provisions.

3. Employing merger review to reduce the probability of anticompetitive coordinated effects

- in addition to attaching to your submission a copy (in English or French) of the pertinent sections from any available merger guidelines issued by your competition agency, please explain and illustrate with cases:

a. can mergers be blocked under your law because of anticipated anticompetitive "coordinated effects" (see outline of Secretariat's background paper for definition). Do such coordinated effects include more than would be actionable under your law as prohibited anticompetitive agreements or abuse of dominance/monopolisation? If so, please identify the extra effects reached.

b. what are the structural and behavioural factors that your agency considers to be especially pertinent in analysing the probability that a merger will produce anticompetitive coordinated effects? Which of those are the most important? Why?

c. Some countries prohibit mergers which have the effect of creating or strengthening a dominant position ("dominance test") while others have opted for a substantial lessening of competition ("SLC") standard. Still others apply both tests and at least one has alternated between the standards. It is also worth noting that many if not all countries employing a dominance test have widened its scope by defining "dominance" to include joint or collective dominance.

i. What are your agency's views as to the relative merits of the dominance and SLC standards in relation to the power to block mergers predicted to produce unacceptable anticompetitive coordinated effects?

ii. If not already addressed under issue 2, supra, and if your merger review process employs the joint/collective dominance concept, what factors and analysis are appealed to in order to demonstrate that a group of firms is jointly/collectively dominant?

QUESTIONS DU SECRÉTARIAT SUGGÉRÉES POUR LES SOUMISSIONS DES DÉLÉGUÉS*

Les pays sont invités à établir une contribution écrite sur l'une quelconque des questions suivantes ou sur la totalité d'entre elles. Quelle que soit la portée de l'étude choisie, les pays sont invités en particulier à fournir des exemples appropriés illustrant l'analyse qu'ils appliquent généralement, ainsi que des commentaires sur l'efficacité perçue de leur démarche.

1. Recourir à l'interdiction des accords horizontaux pour combattre la tarification coordonnée ou d'autres comportements préjudiciables aux consommateurs

- les pays sont invités à étudier des cas illustrant :

  a. les types de preuves indirectes que les tribunaux sont le plus susceptibles d'accepter comme démontrant que des entreprises sont convenues de ne pas se livrer concurrence ;

  b. le traitement des pratiques oligopolistiques anticoncurrentielles ;

- dans quelle mesure ce comportement peut-il être combattu par l'interdiction des accords horizontaux anticoncurrentiels ?

- quelle a été l'expérience de votre agence chargée de la concurrence concernant l'application des notions de "collusion tacite" (voir, par exemple, l'affaire de la pâte de bois à l'UE) et de "parallélisme conscient" dans la lutte contre les pratiques oligopolistiques anticoncurrentielles ?

- si un comportement oligopolistique anticoncurrentiel n'allant pas jusqu'à la collusion explicite peut être maîtrisé par l'application de vos dispositions sur les accords horizontaux, quels remèdes sont disponibles et quelle a été l'expérience de votre agence à cet égard ?

  c. l'application d'interdictions des accords horizontaux anticoncurrentiels pour bannir les "pratiques de facilitation", c'est-à-dire les pratiques qui tendent à permettre plus aisément aux entreprises de conclure des accords ou de coordonner d'une autre manière leurs agissements dans un sens anticoncurrentiel, de détecter les entorses à ces accords/à cette coordination et de punir ces entorses.

* Ces questions sont extraites du guide préliminaire procuré aux Membres pour les aider dans la préparation de leurs soumissions écrites. Elles sont réimprimées ici car quelques soumissions incluses dans cette publication y font référence.

2. Recourir à l'interdiction du "comportement monopoleur" ou de l'abus de position dominante pour combattre la tarification coordonnée ou d'autres pratiques préjudiciables aux consommateurs

- les pays souhaiteront particulièrement examiner/identifier :

  a. les facteurs et l'analyse utilisés pour démontrer qu'un groupe d'entreprises exercent conjointement/collectivement une position dominante et tombent donc sous le coup des interdictions d'abus de position dominante en vigueur dans le pays ;

  b. les abus directs d'une position dominante conjointe/collective qui sont interdits en vertu du droit national de la concurrence, et les problèmes ou succès particuliers qui ont marqué l'application de ces dispositions ;

  c. les "pratiques de facilitation" d'entreprises effectivement ou potentiellement dominantes, notamment de groupes d'entreprises qui exercent une position dominante conjointe/collective, susceptibles d'être interdites comme abus de position dominante en vertu du droit national de la concurrence, et, ici encore, les problèmes ou succès particuliers qui ont marqué l'application de ces dispositions.

3. Recours à l'examen des fusions pour réduire la probabilité d'effets coordonnés anticoncurrentiels

- après avoir joint à votre contribution un exemplaire (en anglais ou en français) des sections pertinentes, des lignes directrices sur les fusions publiées par votre organisme chargé de la concurrence, veuillez expliquer et illustrer à l'aide de cas les questions suivantes :

  a. les fusions peuvent-elles être bloquées en vertu de votre droit interne à cause d'"effets coordonnés" anticoncurrentiels anticipés (pour une définition, voir les grandes lignes du document de référence du Secrétariat). Ces effets coordonnés renferment-ils des aspects autres que ceux qui donneraient lieu à des poursuites en vertu de votre droit au titre des accords anticoncurrentiels interdits ou de l'abus de position dominante/de la monopolisation ? Dans l'affirmative, veuillez indiquer ces effets additionnels.

  b. quels sont les facteurs structurels et comportementaux que votre agence chargée de la concurrence considère comme étant particulièrement pertinents pour l'analyse de la probabilité de voir une fusion produire des effets coordonnés anticoncurrentiels ? Quels sont les plus importants de ces facteurs ?

  c. certains pays interdisent les fusions qui ont pour effet de créer ou de renforcer une position dominante ("critère de la position dominante"), tandis que d'autres ont opté pour un critère de réduction substantielle de la concurrence. D'autres encore appliquent les deux critères, et un pays au moins a utilisé une méthode puis l'autre. Il convient de noter qu'une grande partie sinon la totalité des pays qui appliquent le critère de la position dominante ont élargi sa portée de manière à inclure la position dominante conjointe ou collective.

     i. Quel est le point de vue de votre agence sur les mérites relatifs du critère de position dominante et du critère de réduction substantielle de la concurrence en ce qui

concerne la capacité de bloquer les fusions dont on prévoit qu'elles engendreront des effets cordonnés anticoncurrentiels inacceptables ?

ii. Si ce point n'a pas déjà été traité sous la question 2 ci-dessus, et si votre processus d'examen des fusions s'appuie sur le critère de position dominante conjointe/collective, quels facteurs et quelle analyse sont utilisés pour démontrer qu'un groupe d'entreprises exerce conjointement/collectivement une position dominante ?

AUSTRALIA

Australian industrial market structure is characterised by numerous industries with a highly concentrated market structure. Enforcement of competition policy involves the use of both behavioural and structural constraints.

Australia's competition legislation, the *Trade Practices Act 1974* (TPA), incorporates provisions that address both of these structural and behavioural constraints required to counter the potentially anticompetitive effects of oligopoly market structures.

Section 50 of the TPA prohibits mergers or acquisitions which have, or would be likely to have, the effect of substantially lessening competition. This prohibition can be used to reduce the probability of the development of anticompetitive market structures.

Section 46 of the TPA, prohibiting the misuse of market power, can be used to combat such anticompetitive monopolising behaviour.

Section 45 of the TPA prohibits contracts, arrangements or understandings if they contain a provision that has the purpose, effect or likely effect of substantially lessening competition. This provision on horizontal agreements can be used to fight against co-ordinated pricing or other behaviour harming consumers.

These three provisions in the TPA combine to give Australia's competition authority, the Australian Competition & Consumer Commission (ACCC), a comprehensive range of mechanisms to deal with the potentially anticompetitive effects of oligopolies.

1. Merger Control

Merger regulation is one of the most important elements of Australian competition policy. A copy of the relevant excerpts from the ACCC's Merger Guidelines are contained in Attachment 1. In Australia the merger provisions of the *Trade Practices Act* 1974 (TPA) have generated considerable debate. Section 50 of the TPA was amended in 1993 to prohibit mergers that are likely to have the effect of substantially lessening competition in a market. This amendment replaced the previous merger test which prohibited acquisitions that were likely to create or strengthen dominance of a market. This dominance test had itself been introduced in 1977 to replace the test originally established when the TPA was introduced in 1974, a test of substantial lessening of competition.

The objective of merger regulation in Australia is to assist in the maintenance of competitive markets. However, it is recognised that mergers have both benefits and costs. Mergers may enable improvements in productive efficiency but at the cost of increased potential for the firms in the market to exercise individual or co-ordinated market power. There has been considerable debate in Australia as to how to best measure and weigh these costs and benefits and much of this debate has occurred in the context of the appropriate merger test - substantial lessening of competition or dominance.

1.2 Dominance in Australian competition law

Between 1974 and 1977 mergers in Australia were examined under a substantial lessening of competition test. The test generated a number of compliance and administrative problems. A large number of mergers were caught under the test for close consideration even though almost all of them were ultimately approved. There were economic issues of concern also. A major problem with a test which catches a large number of mergers is that it could weaken the market discipline that mergers and acquisitions have on inefficient firms. The government of the day took the view that the substantial lessening of competition test was having the effect of inhibiting merger activity which should be encouraged to assist Australian industries in achieving economies of scale.

The need for restructuring of Australian industry had been recognised by various government inquiries. For example, the *Green Paper on Policies for Development of Manufacturing Industry* 1975 (pp 189-190) stated that:

> "If industry is to become internationally competitive and export-oriented, its concentration may well have to increase … In many cases the role of government should be to encourage and facilitate mergers, if that will create firms which will be internationally competitive … Law on trade practices should not impede mergers and takeovers which can be shown to offer improved efficiency and increased international competitiveness in Australian industry."

The 1977 amendments to the TPA replaced the 'substantial lessening of competition' test with a 'dominance' test and in doing so significantly narrowed the scope of the merger provisions. Recognising that the intent of the amendment was to encourage more mergers, it is fair to describe the dominance test as a weaker test than substantial lessening of competition. Under the dominance test, mergers and acquisitions which were likely to result in the creation or strengthening of dominance in a market were prohibited. The TPA did not define dominance and interpretation was left to the courts.

In *Trade Practices Commission*[1] *v Ansett Transport Industries (Operations) Pty Ltd* (1978) ATPR 40-071, the court determined that 'dominance' was to be construed as something less than 'control' and should be considered in the ordinary sense of having a commanding influence on. A more expansive exposition occurred in *Trade Practices Commission v Australian Meat Holdings Pty Ltd* (1988) ATPR 49-876.

> "Dominance, unlike control, is not primarily concerned with the formal relationship between entities but rather with their conduct towards each other with in a particular market environment. If the size or strength of a particular entity is such that, in practice, other entities are unable or unwilling actively to compete with it in a particular market, that entity is dominant in that market."

This view of dominance has within it important behavioural connotations. It sees dominance as being more than merely holding the leading position in the market. It relates dominance to an ability to engender particular types of market conduct. This conduct can be specific to the dominant firm such that it can afford to behave to some considerable extent independently of its competitors and its customers, or it may relate to an ability to induce certain types of non competitive behaviour in its market rivals.

The implications of the dominance test on the ability of the Trade Practices Commission to attack co-ordination of behaviour between firms were considerable. The *Ansett-Avis* case (*Trade Practices Commission v Ansett Transport Industries (Operations) Pty Ltd* (1978) ATPR 40-071) established a dominance test. The court examined whether Avis was dominant in the car rental market in Australia. In

reaching a decision that Avis was not dominant, the court considered the following, relying on the judgement of the Court of Justice of the European Communities in the *United Brands*[2] case:

- *The degree of market concentration*. In the *Ansett-Avis* case, it was estimated that Avis had a market share of between 43 and 46 percent. Its nearest rivals Hertz and Budget had shares of 16 and 17 percent respectively. Avis also had the exclusive franchise at airports owned by the Commonwealth Government. However, the court concluded that there existed strong competition as evidenced by the fact that Budget was growing its business at a faster rate than Avis.

- *The power to determine prices independently*. It was determined that Avis did not have the power to gain benefits which would not have been available if there was effective competition. There was evidence of regular movements in the rental hire rates of the three main firms.

- *The height of barriers to entry.* It was determined that there were no major entry barriers. The capital investment was not substantial when cars could be leased and while there may have been some entry barrier in the existence of an exclusive airport franchise, this franchise was about to expire and it was likely that more car rental companies would acquire airport leases.

- *Product differentiation and sales promotion.* No product differentiation was found and although Avis offered a higher standard of service than some of its competitors, its only major sales promotion advantage was its exclusivity at airports.

- *The character of corporate relationships and the extent of corporate integration.* The court determined that the acquisition by Ansett, whose principal business was domestic airlines, would be unlikely to enable Avis to achieve a market share greater than it would be able to acquire independently nor would the acquisition heighten entry barriers.

The Trade Practices Commission subsequently applied these criteria in a number of major merger cases in the 1980s. In its *Annual Report 1984-85* the Commission indicated that by using a dominance test, it would not be in a position to take action against mergers where:

- there were two well-matched local major competitors left in the market;

- there were a number of small competitors who were viable and may develop further, even in circumstances where there is only one major competitor left; or

- imports provide significant competition and provide a secure alternative long-term source of supply.

One effect of such an approach is that very few mergers would be likely to breach the dominance test. By the mid 1980s the view was developing that the merger provisions may have allowed concentration to develop to an extent that allowed anticompetitive behaviour without significant economic benefits. The then Chairman of the Trade Practices Commission, Mr W McComas, commented (in *Business Review Weekly 21 August* 1987):

> "It is an arguable proposition that we have gone far enough in that direction. The Trade Practices Act allows for the duopoly that we find in a number of Australian industries now. Section 50, the

> merger provision, only stops short of one-company domination. In Australia now, we have a huge number of oligopolies (limited competition industries) and a large number of duopolies."

Where there is little import competition and entry barriers are high, the effects of a duopoly structure on behaviour may be considerable. It is not surprising that substantial disquiet developed after a number of mergers in domestic airlines, newspapers, brewing and retailing led to duopolies in markets where opportunities for import competition were very limited.

2. Application of the dominance test

In the mid 1980s three major mergers which were allowed under the dominance test generated considerable controversy. Each of these mergers had significant anticompetitive consequences.

Coles/Myer. The merger of Coles and Myer resulted in a substantial increase in the market for retailing in Australia with some estimates that the combined group controlled as much as 20 percent of Australian retail spending. The merger caused the removal of a significant competitor from the market and possibly prevented entry from a new competitor. The merged firm had substantial market power in a number of markets, particularly in relation to discount department stores where Myer's Target group and Coles' K-Mart together had 70 percent of the market. However, consideration of the merger under the dominance test asserted that the combined entity would still be subject to market pressures from competitors, especially David Jones in department stores and Woolworths in supermarkets.

News Ltd/Herald and Weekly Times. The acquisition by News Ltd of the Herald and Weekly Times group in 1987 resulted in the removal of a major independent competitor in the Australian newspaper industry and gave News Ltd around 70 percent of the Australian newspaper market. However, in most cities the merged group faced competition from another newspaper group. In those cities where there was no significant competitor to the merged group, the Trade Practices Commission required divestiture of certain titles. The divested newspapers ultimately failed and News' principal competitor, John Fairfax Ltd, entered a long period of ownership and management uncertainty which diminished its ability to compete. Competition in the newspaper industry has consequently been substantially lessened since the merger.

Ansett/East-West. The acquisition of East-West airlines by the owners of Ansett Transport industries also drew significant attention to the dominance test. East-West was a small regional airline which had begun to expand beyond its regional base and offer cheap fares on national routes in competition to the long standing duopoly of Ansett and the government owned Australian Airlines (later acquired by Qantas, Australia's leading international airline). The acquisition did not lead to national dominance because of the competition from Australian Airlines. The Trade Practices Commission negotiated divestiture of routes where Ansett was dominant but had difficulty in finding an acceptable purchaser for a number of routes and ultimately allowed Ansett to continue to operate some of these routes.

The effect of these and other less controversial cases led to increased support for a competition policy test for mergers which would prevent those mergers which had considerable anticompetitive effects but were not caught by the dominance provisions.

3. Change to the SLC test

In 1993 amendments to the TPA reintroduced a substantial lessening of competition test. The ACCC has published merger guidelines setting out a five stage evaluation process:

- Identification of the relevant market in terms of four dimensions: product, geographic, functional and time. If the market is not substantial, the ACCC will take no further action.

- If the market is substantial, concentration is considered. A merger proposal is not investigated unless the resulting market share of the four (or fewer) largest firms is 75 percent or more and the merged firm will supply at least 15 percent of the market or unless the merged firm will supply 40 percent or more of the market.

- If these concentration ratios are exceeded the ACCC then considers the nature and extent of imports to determine whether they are likely provide sufficient competitive discipline on the merged firm.

- If import competition is unlikely to provide the appropriate market discipline, the ACCC then considers the barriers to entry and the likelihood of effective new entry.

- If new entry is unlikely to inhibit market power, the ACCC will take into consideration other factors such as: the countervailing power of buyers or suppliers; the availability of substitutes; whether the merger would result in the removal of a vigorous and effective competitor; the extent of vertical arrangements in the market; and whether the merger facilitates sustained increases in prices or profit margins above competitive levels.

Following is a discussion of the Rank / FAL case which was blocked on the grounds that it was likely to result in a substantially lessening of competition in the supply of groceries in the state of Western Australia.

3.1 Rank / FAL[3]

In 1994 Rank Commercial, a New Zealand company, announced a take-over bid for the Australian and New Zealand assets of Foodland (FAL), the only independent grocery wholesaler operating in the state of Western Australia. Prior to the merger, the Coles supermarket chain had a 23 percent share of the Western Australian retail grocery market, with FAL being the leading player in the market, supplying 51 percent of the groceries sold in that state.

A proposed agreement between Rank Commercial and Coles would have seen FAL's Australian assets pass to Coles, increasing their market share to 75 percent. Because FAL was (and is) the only wholesaler of groceries to independent retailers in Western Australia the acquisition would have resulted in Coles supplying groceries to independent retail stores competing with its own retail outlets.

The Commission obtained an injunction to restrain Rank Commercial from issuing its take-over documents. Rank Commercial/Coles subsequently decided not to proceed with the bid, ostensibly on commercial grounds. The Court then made final orders preventing Coles and Rank Commercial from proceeding with the bid.

The ACCC's merger guidelines make reference to the effect that a merger may have on the ability of firms in the post merger environment to engage in co-ordinated pricing or any other co-ordinated anticompetitive conduct. This section of the guidelines is included in Attachment 1 to this submission.

The ACCC has also used merger authorisation applications to examine the possible effects a merger may have on co-ordinated behaviour. Two examples are outlined below.

3.2 Wattyl/Taubmans

In 1995 Courtaulds put its decorative paints business, Taubmans, up for sale. One of Taubman's competitors, Wattyl, advised the ACCC of its interest in acquiring the Taubman's business. At the time, three major paint producers accounted for around 90 percent of the sales (by value) in the Australian decorative paint market. Dulux (owned by ICI) had 45 percent, Wattyl 30 percent and Taubmans 16 percent. The ACCC formed the view that the proposed acquisition was likely to substantially lessen competition and therefore breach s 50 of the TPA. In subsequent discussions, the parties to the merger raised a number of arguments citing public benefit from the merger. As such arguments are not relevant under s 50 of the TPA, the parties lodged an application for authorisation of the merger so that public benefit arguments could be weighed against the anticompetitive detriments expected to result from the merger.

In its authorisation decision[4] the ACCC commented that a reduction in the number of firms in the market would increase the scope for co-ordinated conduct, including both overt and tacit collusion. It took the view that more even market shares as a consequence of the merger may increase the commonality of interests between the market participants. The ACCC decision quoted extensively from the Commission of the European Communities in its decision *Re the Concentration between Nestle SA and Source Perrier SA* [1993] 4 C.M.L.R.

There was considerable disagreement in the evidence submitted by the parties as to whether Dulux was the market leader. The parties' economic advice stated that no single firm was pre-eminent. However, the potential acquirer, Wattyl, in a separate submission, claimed that Dulux was the principal player in the market. This difference in opinion was most significant. The joint submission of the parties claimed that the remaining paint producers who had around 10 percent of the market would have an important role in constraining the conduct of the larger manufacturers. The submission of Wattyl argued that the smaller manufacturers would be unable to constrain the behaviour of the market leader, Dulux, and that only the merged group would be able to provide effective competition to Dulux.

The parties recognised that in a market with two competitors, each with around 45 percent, the likelihood of conscious parallelism or overt collusion is enhanced and addressed the issue in their submission. It was the merging parties' view that such outcomes would be unlikely largely because:

1. the background, structure and strategic approaches of Dulux and the merged Wattyl/Taubmans were quite different;

2. Wattyl/Taubmans products are differentiated, demand growth is unstable and excess capacity is persistent; and

3. there was a competitive constraint imposed by small paint producers, new entry and imports.

The ACCC noted that the key objective of the merger was for Wattyl / Taubmans to achieve market compatibility with Dulux in terms of cost, product range, market share and strategic approach. The ACCC therefore considered that the merger would enhance the structural features conducive to parallel

behaviour. Competitive uncertainty as to a rival's reactions is reduced substantially as each firm is easily able to monitor the activities of the other. Further, in a market such as paint where there are a large number of buyers, and no single buyer represents a substantial part of a supplier's revenue, there are few gains to be made by undercutting a rival to gain market share.

The ACCC also took the view that in a market of three firms where one firm achieves scale economies, much of the competition may come from the smaller second and third firms each trying to gain market share to achieve these economies. A merger of the second and third firm removes this rivalry as they achieve the scale economies and thereby removes the need for the largest firm to respond to the price competition of its previously smaller rivals.

Given that one of the objectives of the proposed merger was to reduce excess capacity, the ACCC was unconvinced that excess capacity would lead to price competition. The merged parties would have no excess capacity after rationalisation and while Dulux was believed to have some excess capacity, the ACCC took the view that it could use this excess capacity as a threat to the merged entity should it contemplate price competition. The ACCC was also concerned by market inquiries which indicated that some retailers supported the merger because they expected it would stabilise prices and improve retail margins, circumstances not conducive to increased competition.

Import competition was limited and branding was important in the market, indicating that neither imports nor new entry were likely to have much impact on competition. Low price elasticity of demand would also reduce the likelihood of competitive pricing.

The ACCC refused authorisation of the merger on the grounds that while there were public benefits from the merger, (not discussed in this summary), the anticompetitive effects from the potential exercise of unilateral and co-ordinated market power were substantial.

3.3 Bristile Holdings Ltd[5]

In 1997 Bristile Holdings (Bristile), the only manufacturer of clay roof tiles in Western Australia, lodged an authorisation application with the ACCC to acquire the concrete tile business in Western Australia of Pioneer Building Products (Pioneer). In the concrete tile business there were two other competitors. The merger would give Bristile 63 percent of the roof tile market. The two remaining competitors would have 22 percent and 15 percent respectively.

The ACCC was concerned that the proposed merger would give Bristile the ability to exert control over both clay and concrete tile prices. It took the view that Bristile might adopt the strategy of lowering concrete tile prices for a period to drive out its competitors by cross subsidising from profits of the higher value clay products. However, in the absence of the acquisition, it would have to sustain a significant reduction in the price of its clay tiles to achieve the same outcome of driving its concrete tile competitors from the market.

In both of the above cases the ACCC took the view that it was more effective to use merger provisions to block the development of a structure conducive to anticompetitive strategic behaviour rather than take action against that behaviour when it occurred.

4. Misuse of market power and an effects test

A narrow merger rule may be acceptable where competition agencies have considerable scope to attack the misuse of market power which may be the outcome of such a merger rule. However, Australian competition law in relation to misuse of market power did not have sufficient strength to combat the weak

merger law. Prior to 1986, section 46 of the TPA, dealing with misuse of market power, applied only to monopolists or those with considerable market dominance. In amendments to the TPA in 1986, the Government recognised that competition laws which allowed mergers to the point of duopoly needed to have more rigorous laws against anticompetitive behaviour. The amendments changed the test for the application of section 46 from that of a corporation being in a position substantially to control a market to a test of whether a corporation has a substantial degree of market power.

In the Second Reading Speech to the Trade Practices Revision Bill 1986, the Attorney General stated that as well as applying to a larger number of firms, the misuse of market power provisions "would make it clear that the courts could infer the requisite predatory purpose from the conduct of the firm or from the surrounding circumstances."

In Australia, to establish misuse of market power it is necessary to establish three circumstances:

- the corporation engaging in the conduct must possess a substantial degree of market power;
- the corporation must take advantage of that power; and
- the corporation must have engaged in the conduct for a proscribed *purpose*.

The TPA clearly specifies a proscribed purpose as:

- eliminating or substantially damaging a competitor;
- preventing entry in that or any other market; or
- deterring or preventing a person from engaging in competition in that or any other market.

Establishment of a purpose requires a high burden of proof. While the courts will consider subjective elements in addition to objective ones, and have been willing to infer purpose from the nature of the arrangements, the circumstances in which it was made, and its likely effect, certain conduct which adversely affects competition may not be covered. If this conduct is more likely to occur in highly concentrated markets, a structure facilitated by a dominance test, Australian competition policy may be severely limited by merger provisions based on a dominance test and a market power test based on purpose.

The types of conduct which are likely to be examined under this section include actions such as predatory pricing; exclusive dealing; refusal to supply; loyalty rebates; raising of rivals' costs and the strategic creation of entry barriers.

In a number of cases after the amendments were introduced it became clear that while the lower threshold of 'substantial degree of power in a market' had widened the scope of the section, inferring purpose still presented difficulties. The most significant case involving misuse of market power is the 1989 High Court of Australia decision in *Queensland Wire Industries Pty Ltd v The Broken Hill Proprietary Company Limited and Anor* (1989) ATPR 40-925.

The essential facts of the case were that BHP, which produced in excess of 95 percent of Australia's steel, was the sole Australian producer of the Y bar, which BHP sold only to a subsidiary. The Y bar was used to make star picket fencing posts. Queensland Wire Industries (QWI) produced and sold barbed wire in competition to the BHP subsidiary. QWI sought supply of the Y bar but BHP's policy was

to refuse supply or offer supply at an excessively high price so as to keep the market for star picket fencing posts to itself.

As a result, QWI was unable to supply fencing and wire and thereby compete against the BHP subsidiary which offered fencing and wire together. QWI successfully argued that BHP misused its substantial market power for the purpose of preventing entry into a market.

The critical element in the High Court's decision was that the Court considered in the context of a market with a dominant firm, whether that firm would have behaved differently if it were operating in a competitive market. The test was whether the firm's conduct would only be possible because of the absence of competitive conditions. However, the case concerned a virtual monopolist and a very specific conduct, refusal to supply, and in a number of subsequent cases, complainants found that it was often difficult to infer purpose from conduct.

In applying the misuse of market power provisions, Australian competition authorities have found that the courts have sometimes been hesitant in identifying market power in the first instance and in accepting that there was some illegal purpose in the second. In *Dowling v Dalgety Australia Ltd* (1992) ATPR 41-165, the court specified the major factors to be taken into account when identifying market power:

- the ability of a firm to raise prices above the efficient supply cost without competitors taking customers over time;
- the extent to which competitors, or potential competitors, act as a constraint on the firm's conduct;
- the market share of the firm;
- the existence of vertical integration; and
- the extent of barriers to entry.

The court determined in a meat processing case that a market share of 15 percent was insufficient to invoke s 46 and in a later case noted that market share in itself would not conclusively establish the existence of market power, as such market share may be only short term. In another case, a taxi owner whose contract with a base operator was cancelled, failed to prove that the operator had a substantial degree of market power when the base operator's fleet accounted for around 40 percent of the licensed taxis in the particular geographic market.

In *General Newspapers Pty Ltd v Telstra Corporation* (1993) ATPR 41-274, Telstra, Australia's primary telecommunications company was found not to have used its market power for a proscribed purpose in the market for directory advertising, when it awarded long term contracts for the printing of Yellow Pages directories conditional on the printers not using the presses installed for the purpose, to print for competitors without Telstra's consent.

The Trade Practices Commission recognised that proving purpose was often difficult. In a submission to the Cooney Committee[6] which was considering whether to recommend the reintroduction of the substantial lessening of competition test, the Commission noted a number of examples of conduct of firms with substantial market power that substantially lessens competition but may not be caught under Australian trade practices. Examples included:

- buying up of products to prevent the erosion of existing price levels;
- adoption of product specifications that are incompatible with products produced by any other person and designed to prevent entry into or to eliminate competition from a market;
- selective introduction of fighting brands;
- raising rivals' costs;
- strategic creation of entry barriers;
- impeding or preventing entry into or expansion in a market by:
  - squeezing, by a vertically integrated supplier, of the margin available to unintegrated competitors; or
  - acquisition by a supplier of customers who would otherwise be competitors of a supplier.

The Australian Department of the Treasury also identified some of its concerns in their submission to the Cooney Committee of Inquiry. These concerns included:

- two well-matched competitors may be happy to coexist without any vigorous competition.
- two industry participants may facilitate formal or informal collusion more easily than a less concentrated market structure.
- anticompetitive strategies may be able to survive because of the lack of a dynamic environment where the responses of rivals, including potential rivals, is less predictable.
- price signalling behaviour is more likely.

5. Anticompetitive agreements

As mentioned previously, in the absence of strong structural policies which inhibit the development of tight oligopolies and duopolies in the first instance, behavioural rules will be of more importance. In relatively small economies such as Australia with already high levels of concentration, enforcement of behavioural rules becomes critical. Section 45 of the TPA prohibits contracts, arrangements and understandings if they contain a provision which has the purpose, effect or likely effect of substantially lessening competition. Under this section of the TPA are a variety of proscribed agreements between competitors including:

- agreements which involve market sharing;
- agreements that contain an exclusionary provision; and
- agreements that fix prices, including agreements which purport to 'recommend' prices but which in reality fix prices by agreement.

A study by Round and Siegfried (*Review of Industrial Organisation October* 1994) examined the effectiveness of enforcement of horizontal price agreements in Australia. The study found that relatively

few price fixing cases have been instituted. Until 1993 the penalties for price fixing offences were capped at a very low maximum of $A250 000. The courts also appeared reluctant to impose substantial fines. In 1993 the maximum penalty was increased to $A10 000 000 and the trend is now towards the imposition of much higher penalties by the courts for this type of behaviour.

In two major cases decided after the penalties were increased, but involving conduct which occurred before the penalties were increased, the courts imposed substantial penalties. In a 1995 case involving price fixing by freight companies, penalties in excess of $A11 000 000 were imposed and in a case of price fixing and market sharing by major pre-mixed concrete companies, fines of around $A22 000 000 were imposed. It may be that the new, higher penalties and courts which now appear to treat price fixing more seriously may have a major deterrent effect on such conduct in the future.

Given the relatively low penalties imposed until 1993, Round and Siegfried expressed surprise that a larger number of price fixing agreements had not been uncovered. They considered that a possible explanation related back to levels of concentration in Australian industry. In markets where there are only a small number of firms, informal agreements and price leadership arrangements may be relatively easy to implement.

Australian competition authorities have had little success in persuading courts to infer price fixing from circumstantial evidence. The following provide useful case studies.

5.1 Trade Practices Commission v Email Ltd & Anor (1980) ATPR 40-172

Email and Warburton Franki were the only Australian manufacturers and suppliers of kilowatt hour meters until mid 1978, when Warburton Franki ceased business. Between 1968 and 1978 Email's market share fluctuated between sixty and seventy percent, with Warburton Franki having the remainder. Around ninety eight percent of the meters were sold to electricity supply authorities and the other two percent to private users and contractors. The supply authorities required that there be more than one manufacturer of meters.

Both companies issued identical price lists; submitted identical tenders; adopted the same price variation clause; sent to each other their respective price lists, which showed the prices as identical; forwarded to each other new price lists immediately they changed prices or introduced any new meter or component; and tendered in accordance with their respective price lists.

The principal basis of the Trade Practices Commission's case was that the issue and forwarding of the price lists by Email and Warburton Franki to each other, in all the circumstances, constituted the communication necessary to give rise to the meeting of minds essential to any arrangement or understanding. The Commission alleged that these communications between the two suppliers would give rise to mutual expectations and each of the companies would accept inhibitions as to its conduct.

However, it would seem that the view of the court was that the sending of price lists was of little significance. By sending the price list to Warburton Franki, Email helped its competitor to follow Email's prices if it wished to but there was no obligation to do so. Email's price lists were easily available to Warburton Franki from customers. The receipt of Warburton Franki's price list by Email was of little significance to Email. Email was confident that Warburton Franki would follow its price increases based on previous experience. The sending of the price list by Email merely sped up the price leadership processes.

In evidence, Warburton Franki stated that it was the company's belief that Email had lower costs and that should Warburton Franki, being much smaller and having a higher cost base, cut its prices, it would provoke a price war which would send it out of business.

The court decided that it was not the exchange of price information that led to parallel prices. In the court's view the parallel prices were produced by market competition and the necessity for Warburton Franki to follow Email. The court dismissed the Commission's case.

5.2 Trade Practices Commission v Service Station Association Limited & Ors (1992) ATPR 41-179

The TPC took action against the Service Stations Association (SSA) alleging that Sydney petrol retailers made an arrangement or arrived at an understanding with each other and with the SSA to fix petrol prices. The SSA had embarked on a campaign to improve service station profitability. To this end it had organised meetings of petrol retailers whereby retailers were encouraged to maximise profit for the site rather than maximising volume of fuel sold by way of discounting. After the meetings, retail prices and margins in Sydney increased substantially. The SSA published recommended prices in their monthly journal which would enable dealers who followed the prices to achieve reasonable profitability.

The Court held that there was every reason for the SSA to convey to its members the view that they should consider carefully, as individuals, whether they were charging enough to stay in business and whether they should raise their prices. It further found that an arrangement or understanding to increase margins over those existing at some previous period could not constitute an arrangement to fix, control or maintain prices. There was no evidence that dealers agreed between themselves that each would follow the recommended prices.

It was not sufficient to show that the "natural, probable and inevitable consequence" of the conduct was the making of some arrangement, according to the Court.

On appeal by the ACCC to the Full Court of the Federal Court, the Full Court agreed that there was "an absence of any evidence of mutual promises or undertakings as between dealers or as between dealers and the SSA" and there was no evidence that the prices were fixed, controlled or maintained.

5.3 Australian Competition and Consumer Commission v Mobil Oil Australia Limited (1997) ATPR 41-568.

Mobil Oil Australia Limited (Mobil), BP Australia Limited (BP) and the Shell Company of Australia Limited (Shell) marketed petroleum products to retail customers. Their retail sites fell into two categories. First, there were sites owned by the company and operated either by an employee or an agent operating on commission. These were known as "CA sites". At these sites the oil company directly set the retail price. Secondly, there were sites operated by tenants. These were called "franchise sites". The franchisee purchased petroleum products from the oil company and re-sold the products to retail customers.

The Commission alleged that the oil companies agreed between themselves that each would raise, or maintain, retail prices at its CA sites at agreed levels and direct its franchisees to raise their prices to, or maintain their prices at, the same levels. A critical element of the arrangement alleged was an agreement that each oil company would ensure that its franchisees follow the price of its CA sites by putting economic pressures on them to do so. This pressure, it is said, took the form of either increasing wholesale prices to the franchisee or withdrawing "price support" (subsidies).

The court rejected the Commission's case. The judge stated that the Commission's case amounted to a view that if prices at each company's CA and franchisee sites were the same, it must have been because the companies entered into an arrangement to keep them the same.

In its decision, it commented that "the retail petroleum products market, with its highly visible price boards advising retail price, and its mobile customers, is one where each trader's prices and fluctuations in those prices, are highly visible to competitors as well as customers. Consequently parallel pricing is as likely to follow from the observation and independent decision of rival traders as from prior arrangement". It was the court's view that much of what the Commission's case relied on could be explained by factors other than illegal arrangements and that much of the conduct alleged by the Commission was consistent with close observation of the behaviour of competitors rather than any agreement between competitors.

Of the cases concerning anti-competitive agreements won by competition authorities in Australia, many have involved relatively small firms. The majority of these cases have involved price fixing in retail petrol markets. The Australian retail petrol market has experienced major intermittent price wars in particular geographic regions. Price fixing agreements have often occurred as firms attempted to restore profit margins to previous levels. In *TPC v Culley & Anor* (1983) ATPR 40-399 a petrol price war in Perth had pushed retail prices down to the government approved wholesale price. A number of small petrol retailers agreed to raise the retail price at least two cents per litre above the wholesale price. Two retailers admitted to attempting to get agreement from other retailers (but were ultimately unsuccessful and the price war continued).

The judge in the case fined the firms a "nominal" $A500 and commented that:

> "… the respondents' conduct was motivated by an understandable desire on their part to achieve a reasonable level of profitability in their businesses without causing harm to the public … Whilst their conduct was clearly in breach of the Act, it is difficult not to have some sympathy with [them]."

In a number of similar cases involving small retailers, courts in Australia expressed sympathy for the retailers involved and fines were small.

One of the more useful examples of the approach of the courts to horizontal price fixing arrangements is that of *Trade Practices Commission v Nicholas Enterprises & Anors* (1979)[7]. The TPC commenced proceedings against liquor retailers claiming contravention of s 45 of the TPA in that they made an agreement or arrived at an understanding which had the effect of lessening competition. The essence of the arrangement was that the parties agreed to reduce the discount on bottled beer by reducing the allowance offered to the public on each purchase of twelve 740ml bottles of beer from three to two.

The circumstances of the arrangement were as follows. Four hotels were charged with having agreed at an informal meeting of hoteliers to reduce beer discounts prior to the peak Christmas demand. The meeting had not been organised to discuss prices and the hoteliers held social lunches at regular intervals. The participants at the meeting agreed that sometime over lunch, discussion had turned to the high level of discounting and its effect on profits. The leading discounter indicated that his hotel would be reducing discounts in two weeks time. Another hotelier announced that he would do the same and encouraged the others to do the same. The third and the fourth did not specifically agree to anything at the meeting, with the third hotelier indicating that the proposal was "interesting" and the fourth making no comment. However, all four in fact raised their prices, and on the same day.

The trial judge found the first two hoteliers guilty. He commented that the leading discounter had the most to gain from any arrangement that reduced discounting. The second guilty party was a small suburban hotelier which did not advertise itself as a discounter of packaged beer. When determining penalties the judge commented that it was difficult to determine the effect of the understanding on the market but that there were 526 liquor outlets at the time and thus an agreement between a leading discounter and a small retailer may not have a particularly detrimental impact on competition.

The latter two hoteliers were found not to have been a party to an understanding, as they had not accepted any obligation nor raised any expectation that they would behave in the same way. One of the two stated in his defence that he had driven past the hotel of a competitor and observed from price boards outside the hotel that discounts had been reduced and subsequently reduced his own discounts when he returned to his hotel. The other hotelier produced evidence of advertising material produced prior to the lunch which indicated that he had planned to reduce discounts.

The court found that parallel action is insufficient if there exists a plausible alternative explanation for the conduct.

Round and Siegfried commented that the words "contract, arrangement or understanding" in the Australian legislation have tended to be treated as synonymous by Australian courts. They found that the courts have considered that there are essential elements needed before courts will accept that there exists an understanding. These are:

- the parties must have communicated with each other;
- each needed to have raised an expectation in the mind of the other; and
- each to have accepted an obligation.

Round and Siegfried concluded that, in Australia, the competition authority:

> "can only expect to win price fixing cases, in the absence of admissions, where it is in possession of direct, "smoking gun" evidence, or where, when only circumstantial evidence is available, it is so "overwhelming" and inconsistent with an alternative explanation based on independent commercial considerations as to permit an inference of an understanding to be drawn."

It is relevant to note however, that where the ACCC has such a 'smoking gun', the parties are more likely to settle without going to court, such as in the 1995 price fixing and market sharing case in the pre-mixed concrete industry. This has the effect of limiting the amount of analysis and evaluation by the Federal Court in Australia on these issues.

6. Conclusion

Australian competition policy with regard to anticompetitive behaviour by firms with substantial market power is highly specific with regard to the kinds of behaviour which will be considered by the courts to be breaches of the TPA. Further, Australian courts have been hesitant in taking action against anticompetitive agreements where the evidence is largely circumstantial. However, there is little doubt that strategic behaviour by individual firms with substantial market power and co-ordinated parallel behaviour by firms in highly concentrated markets can lead to anticompetitive outcomes. Consequently, merger policy which used a dominance test is argued to have allowed the development in Australia of highly concentrated and dominant firm oligopolies conducive to anticompetitive practices and parallel and co-ordinated pricing. The substantial lessening of competition test which has been used since 1993 lessens

the development of market structures which facilitate anticompetitive actions that may not be effectively attacked by conduct provisions of competition policy.

The strengthening of the mergers test by moving from dominance to substantial lessening of competition and the increase in the maximum penalties for breaches of the anticompetitive conduct provisions to $A10 million per offence now provide Australia with powerful instruments to attack abuses of market power and other anticompetitive co-ordinated behaviour. The increased willingness of the Courts in recent years to impose significant penalties for price fixing will assist in strengthening the culture of compliance with competition policy. Australian competition authorities are now in the strongest position ever to block the development of anticompetitive structures in the first instance and to deter the exercise of anticompetitive arrangements.

NOTES

1. The Trade Practices Commission merged with the Prices Surveillance Authority in November 1995 to form the Australian Competition & Consumer Commission (ACCC).

2. United Brands v Commission [1978] 1 E.C.R. 207: 1 C.M.L.R. 429.

3. Trade Practices Commission v Rank Commercial Limited & Ors (1994) ATPR 41-324.

4. Wattyl (Australia) Pty Limited, Courtaulds (Australia) Pty Limited & Ors (1996) ATPR (Com) 50-232.

5. Bristile Holdings Limited (1997) ATPR (Com) 50-250.

6. Senate Standing Committee on Legal and Constitutional Affairs (1991) Mergers, Monopolies and Acquisitions: Adequacy of Existing Legislative Controls (AGPS, Canberra, 1991).

7. Trade Practices Commission v Nicholas Enterprises Pty Ltd, Saturns Holdings Pty Ltd, Rex Freehold Pty Ltd, Morphett Arms Hotel Pty Ltd, Lion Bus Co. Pty Ltd, Merit Nominees Pty Ltd, General Development Corporation Pty Ltd and Agett Nominees Pty Ltd (1979) ATPR 40-126.

Annex 1

EXCERPTS FROM THE ACCC'S MERGER GUIDELINES[1]

Substantial Lessening of Competition

5.4 Competition is a process of rivalry between firms, where each market participant is constrained in its price and output decisions by the activity of other market participants. In *QCMA* the [then Trade Practices] Tribunal quoted with approval the report of the U.S. Attorney-General's National Committee to Study the Antitrust Laws:

> "The basic characteristic of effective competition in the economic sense is that no one seller, and no group of sellers acting in concert, has the power to choose its level of profits by giving less and charging more. Where there is workable competition, rival sellers, whether existing competitors or new or potential entrants in the field, would keep this power in check by offering or threatening to offer effective inducements ..."[2]

5.5 The Tribunal went on to state:

> "In our view effective competition requires both that prices should be flexible, reflecting the forces of demand and supply, and that there should be independent rivalry in all dimensions of the price-product-service packages offered to consumers and customers.
>
> Competition is a process rather than a situation. Nevertheless, whether firms compete is very much a matter of the structure of the markets in which they operate. The elements of market structure which we would stress as needing to be scanned in any case are these:
>
> *(i)* the number and size distribution of independent sellers, especially the degree of market concentration;
>
> *(ii)* the height of barriers to entry, that is the ease with which new firms may enter and secure a viable market;
>
> *(iii)* the extent to which the products of the industry are characterised by extreme product differentiation and sales promotion;
>
> *(iv)* the character of 'vertical relationships' with customers and with suppliers and the extent of vertical integration; and
>
> *(v)* the nature of any formal, stable and fundamental arrangements between firms which restrict their ability to function as independent entities."[3]

5.6 Competition is inhibited where the structure of the market gives rise to market power. Market power is the ability of a firm or firms profitably to divert prices, quality, variety, service or innovation from their competitive levels for a significant period of time.[4] Dawson J. in *QWI* quoted approvingly the Kaysen and Turner definition of market power:

"A firm possesses market power when it can behave persistently in a manner different from the behaviour that a competitive market would enforce on a firm facing otherwise similar cost and demand conditions."[5]

Firms with market power have discretion over their price and output decisions; competitive firms are compelled to perform by the discipline of the market.

5.7 Section 50 differs from the other prohibitions contained in Part IV of the Act, because it regulates market *structure*, to *prevent* the creation of or an increase in market power and consequent anti-competitive *conduct*, rather than directly regulating that conduct.

5.8 The conduct which is prevented by s 50 may be unlawful, involving breaches of other sections of Part IV, or it may be lawful conduct which would nevertheless be anticompetitive, resulting in less efficient markets and consumer detriment. The first category would include conduct such as price fixing and predatory pricing; the latter would include conduct such as tacit price co-ordination or unilateral price rises.

5.9 The Cooney Committee, whose inquiry recommended the change of test in s 50, took the view that the best way to protect against misuse of market power is to prevent it being created in the first place. It quoted Treasury's submission that:

"The potential anti-competitive effects, which may be difficult and costly to detect and act against under current arrangements, may better be avoided by preventing mergers than by applying other sections of the TPA (and other legislation)."[6]

5.10 The Attorney-General's second reading speech at the time of the amendments to s 50 reiterated the preventive nature of merger regulation:

"Merger regulation is an important element of any law aiming to preserve levels of competition. Mergers can lessen competition, potentially providing increased scope for price rises or collusive behaviour and lessening dynamic factors such as the rate of innovation. These possible detriments provide the rationale for government intervention in the area of mergers."[7]

5.11 Market power may be exercised either unilaterally by a single firm, or co-ordinated among firms. The unilateral exercise of market power does not depend on the co-operation of other market participants. A firm with unilateral market power can assume that its rivals will behave competitively in response to market prices, but nevertheless their capacity to defeat a price rise is limited. By contrast, the co-ordinated exercise of market power depends on the co-operative or accommodating actions of other market participants.

5.12 Under the previous 'dominance' test, the major goal of merger enforcement was to inhibit the acquisition or expansion of unilateral market power by a firm which would be in a position to dominate a market.

5.13 However, not all mergers increasing unilateral market power would have been prohibited by the test. In particular, markets for differentiated products will generally permit the exercise of some degree of unilateral market power by firms which are not dominant, but which have a large market share and strong brand loyalty. Mergers which facilitate a significant increase in the exercise of such market power would be considered to 'substantially lessen competition'.

5.14 In addition, mergers which are likely to facilitate the exercise of co-ordinated market power through explicit or tacit collusion, conscious parallelism or learned behaviour, would also be considered to 'substantially lessen competition'.

5.15 The primary reason for being concerned about mergers, especially between competitors, is that they increase the likelihood that the merged firm would have greater scope to set prices above the competitive level, or otherwise distort competitive outcomes, either alone or in co-ordination with other firms selling the same product. However, it is well recognised that mergers can also yield significant benefits. These sometimes take a traditional form - internal efficiencies such as economies of scale or scope or transactions savings through vertical integration - but it is also recognised that mergers are an important aspect of the overall 'market for corporate control', in which outsiders who believe they are able to improve the efficiency of a firm are prepared to bid above current market values. Hence, a blanket prohibition against mergers, even mergers between competitors, would be inappropriate. Only those mergers which would have the effect, or be likely to have the effect, of *substantially* lessening competition are prohibited.

5.16 The word substantial has been the subject of differing interpretations in different contexts and in relation to other sections of the Act. It has sometimes been interpreted as meaning 'real or of substance' and sometimes as 'large or weighty'. In relation to s 47 of the Act, Smithers J. stated in *Dandy Power*:

"To apply the concept of substantially lessening competition in a market, it is necessary to assess the nature and extent of the market, the probable nature and extent of competition which would exist therein but for the conduct in question, the way the market operates and the nature and extent of the contemplated lessening. To my mind one must look at the relevant significant portion of the market, ask oneself how and to what extent there would have been competition therein but for the conduct, assess what is left and determine whether what has been lost in relation to what would have been, is seen to be a substantial lessening of competition. I prefer not to substitute other adverbs for 'substantially'. 'Substantially' is a word the meaning of which in the circumstances in which it is applied must, to some extent, be of uncertain incidence and a matter of judgement. There is no precise scale by which to measure what is substantial. I think in the context, particularly the penalty and other remedies for contraventions of the Act, and the nature of trade which is the subject of the Act, the word is used in a sense importing a greater rather than a less degree of lessening. Accordingly in my opinion competition in a market is substantially lessened if the extent of competition in the market which has been lost, is seen by those competent to judge to be a substantial lessening of competition. Has competitive trading in the market been substantially interfered with? It is then that the public as such will suffer ...

Although the words 'substantially lessened in a market' refer generally to a market, it is the degree to which competition has been lessened which is critical, not the proportion of that lessening to the whole of the competition which exists in the total market. Thus a lessening in a significant section of the market, if a substantial lessening of otherwise active competition may, according to the circumstances, be a substantial lessening of competition in a market."[8]

5.17 The Explanatory Memorandum states that:

"The term 'substantial lessening of competition' is used widely through the Principal Act. It is here intended to mean an effect on competition which is real or of substance, not one which must be large or weighty."[9]

This was clarified by the government during the Bill's passage through the Senate:

"In signifying its intention that that word as now proposed to be used in s 50 should bear the meaning 'real or of substance', the Government intends that the test should apply to effects on competition which are not merely discernible but which are material in a relative sense in the impact they may have upon effective competition in the market place."[10]

5.18 Hence, the threshold in s 50 would appear to be a relative one, either qualitative or quantitative. Where there is a reasonable likelihood that prices in the relevant product market will be maintained at a significantly greater level than they would be in the absence of the merger, or where competitive outcomes would be otherwise distorted, the Commission will consider there to be a substantial lessening of competition.

5.19 Increased exposure to global markets is placing pressure on domestic firms to reduce costs, improve quality and service and innovate in order to become more competitive. Mergers may be one means of achieving such efficiencies. Section 50 is concerned with the lessening of competition in a market, not with the competitiveness of individual firms. However, an acquisition which increases the competitiveness of the merged firm may also increase (or not substantially lessen) competition in a market.[11] While efficiencies generally arise as a question of public benefit, which falls for consideration under authorisation (see section 6), they are relevant in a s 50 context to the extent that they impact on the level of competition in a market.

5.20 The analysis of efficiencies in a s 50 context must be integrated within the framework of competition analysis, rather than being considered as a 'trade-off' with competition effects, as might be done in an authorisation context (see section 6 below). The relevant question is the effect or likely effect of the merger on firms' abilities and incentives to compete in the relevant market, including any effect flowing from efficiencies:

"The weight and significance accorded to different types of efficiencies should be a function of their magnitude and probability, the degree to which they likely will enable the merged firm not only to be a better competitor but to enhance (or not lessen) competition and thus benefit consumers, and the delay with which these consumer benefits are to be realised."[12]

5.21 In considering whether a merger is likely to substantially lessen competition, the Commission will not simply compare the pre- and post-merger scenarios. Section 4G defines a lessening of competition to include preventing or hindering competition. In some circumstances, it may be that without the merger, competition would be likely to increase in the relevant market and that the merger will prevent or reduce the potential increase in competition. Hence, for example, in a market where entry is difficult, a merger which forestalls entry to the market may be considered to substantially lessen competition. Alternatively, a merger may replace an unstable oligopolistic co-ordination of prices with a single firm's market power. Although prices may be no higher after the merger than before, there is no longer the possibility that price co-ordination will break down and competition break out between the merged firms. This too could be considered a substantial lessening of competition.

5.22 The preceding discussion has centred on the exercise of market power and potential lessening of competition on the supply side of the market. However, it is also possible for market power to be exercised in an analogous way on the demand side of the market. Where firms have market power on the demand side of the market they may be in a position to impose a significant price decrease, or other deterioration in terms, on sellers, depressing output below its competitive level.

5.23 In many industries the exercise of such market power is not possible, even by a large buyer, because supply will be highly price elastic; either because unit costs are constant or declining over a large output range and/or because the product is traded internationally and domestic supply can be readily diverted to export markets. Firms will rapidly remove resources from the (domestic) market in response to any attempt to depress price below its competitive level.

5.24 However, there are significant exceptions to this. In particular, many primary industries, which utilise scarce resources, are characterised by less than perfectly elastic supply, reflecting diminishing returns from scarce resources. One of the few merger cases to reach the courts, *Australian Meat Holdings*, involved the creation of a dominant position in the acquisition of fat cattle in North Queensland.[13] Similarly, labour intensive industries, particularly where workers have limited alternative employment opportunities, such as clothing manufacture, are often characterised by less than perfectly elastic supply. In some industries, while long run supply may be highly price elastic, short run supply is often not; and if long run adjustments take an extended period, there may be the opportunity and incentive for considerable competitive damage to occur.

Market Concentration

5.84 Merger factor (c) requires the Commission to consider the level of concentration in the market. Market concentration refers to the number and size of participants in the market. A concentrated market is a necessary but not sufficient condition to enable the exercise of market power. If the relevant market is properly defined, a firm or firms will not normally be able to exercise market power in the absence of a significant market share.

5.85 A merger which increases the level of concentration in a market may reduce competition by increasing the unilateral market power of the merged firm and/or increasing the scope for co-ordinated conduct among remaining competitors.

5.86 The unilateral exercise of market power requires that a firm has sufficient control of a market, such that it can profitably 'give less and charge more' without being threatened by competing suppliers. For undifferentiated products, this normally requires that a firm control a substantial portion of capacity. The larger the percentage of total market supply which a firm accounts for, the less severely it must restrict its own output in order to procure a given price increase and the more likely such conduct is to be profitable. For differentiated products, brand loyalty and related factors may further inhibit smaller rivals from successfully preventing the unilateral exercise of market power. Market shares will generally be a good indicator of consumer preferences and brand loyalty for the firms' products; hence the greater the market share of the merged firm, the more potential switching between differentiated products will have been internalised within the firm.[14]

5.87 A reduction in the number of firms operating in a market increases the scope for co-ordinated conduct, including both overt and tacit collusion. It becomes easier to reach agreement on the terms of co-ordination, to signal intentions to other market participants and to monitor behaviour. More even market shares may increase the commonality of interest between market participants in some circumstances. In other situations, the creation of one firm with a large market share may increase the likelihood of price leadership.

5.88 Furthermore, where market structure has been highly concentrated and market shares have been stable for a long period of time, this will tend to suggest that there are barriers to the entry of new

market participants, which might otherwise undermine and constrain the exercise of market power.

5.89 Since market shares are often more readily available than other information, they are a relatively low cost means of screening out many mergers which are not likely to result in a substantial lessening of competition. The Commission has adopted concentration thresholds below which it is unlikely to intervene in a proposed merger. The thresholds have been established on the basis of the Commission's historical experience of mergers and knowledge of current market structures.

5.90 If the merger will result in a post-merger combined market share of the four (or fewer) largest firms (CR4)[15] of 75 percent or more and the merged firm will supply at least 15 percent of the relevant market, the Commission will want to give further consideration to a merger proposal before being satisfied that it will not result in a substantial lessening of competition. In any event, if the merged firm will supply 40 percent or more of the market, the Commission will want to give the merger further consideration. The twofold thresholds reflect concerns with the potential exercise of both co-ordinated market power and unilateral market power.[16]

5.91 Below these thresholds, the Commission is unlikely to take any further interest in a merger. However, it must be emphasised that the calculation of market shares is critically dependent on market definition. Parties should be aware that the Commission will not necessarily accept their identification of the relevant market. The Commission will also want to consider the vertical independence of remaining rivals in a market before determining that a merger is unlikely to lessen competition (see paragraph 5.141 below).

5.92 A further relevant consideration is the extent of the increase in concentration. In many situations, acquisition of a small market player, resulting in a small increase in concentration, will have little effect on competition. However, in some instances, a small increase in concentration may involve the removal of a market participant who has played a significant role in maintaining a competitive market, e.g. by undermining attempts to co-ordinate market conduct. In other circumstances, a small acquisition may form part of a pattern of creeping acquisitions, which have a significant cumulative effect on competition. Vertical mergers may involve no increase in concentration, but may enable the extension of market power into a vertically related market (see paragraph 5.142 below).

5.93 Market shares may be calculated with reference to capacity, sales volumes or sales values. Each conveys different information regarding the likely impact of a merger on competition. The Commission will place greatest weight on data which best reflects firms' future competitive significance. Capacity figures may be particularly useful as an indicator of market power in markets for undifferentiated products.[17] However, sales figures provide a better indication of firms' actual position in the market, which may reflect their access to distribution networks or the value of brand loyalty. The dollar value of sales is a particularly useful indicator of competitive strength in markets characterised by product differentiation and brand loyalty.

5.94 Imports should be included in the calculation of market shares and concentration ratios. Where a company is both an importer and a local manufacturer, the two types of supply should be treated as a single market share.

5.95 Post-merger market shares and concentration can generally only be computed on the basis of historic sales patterns, which may not be reflective of likely future patterns after the merger. There may, for example, be substantial new capacity coming on stream in a manufacturing

product market, there may be new licences about to be issued in a broadcasting market, or some firms may be running out of reserves in a primary product market. More generally, business customers are often reluctant to become dependent on a single supplier and may shift their custom if two suppliers merge. The Commission will consider any arguments which suggest that future market shares are likely to be significantly different from historic shares.

5.96 If the proposed merger does not fall within the 'safe harbours' established by the concentration criteria, the Commission will need to give close consideration to other merger factors to determine whether or not the merger is likely to result in a substantial lessening of competition.

Co-ordinated Conduct

5.155 One factor which is of general relevance is the extent to which the market is characterised by conditions conducive to co-ordinated conduct. While the exercise of unilateral market power does not require accommodating action by remaining firms in a market, the exercise of co-ordinated market power does. This does not necessarily involve collusion of the kind covered by s 45 but may simply involve signalling or conscious parallelism. Features of the market which impinge on the likely rewards from co-ordination, the likelihood of reaching an agreement, and the ability of the parties to detect and punish deviations from the agreement, are all relevant to the likelihood of such conduct occurring and being successful in the future.

5.156 Some of the factors affecting the likelihood of co-ordinated conduct are:

- A small number of firms increases the likelihood that firms will recognise mutual benefits from co-operation, and makes it easier to reach an agreement and detect cheating;
- The absence of potential entrants or fringe competitors makes it less likely that co-ordinated conduct will be undermined;
- Inelastic demand increases firms returns from co-ordination vs competition;
- Product homogeneity makes it easier to reach an agreement and easier to detect deviations;
- Firm homogeneity, similarity of cost and other conditions, e.g. vertical integration, product lines or production capacity, affecting the interests of rivals makes it easier to reach an agreement;
- Posted prices or open bids, i.e. transparency of prices, make monitoring an agreement easier;
- Vertical relationships may enable price signalling or price monitoring downstream;
- •Size and frequency of purchases affects firms incentives to co-operate or compete;
- Industry associations and fora may facilitate the flow of information on prices and outputs between market participants and/or may facilitate them reaching an agreement.

5.157 If a merger increases the likelihood of co-ordination it is likely to substantially lessen competition. Both horizontal and vertical mergers may have this effect. For example, mergers can increase the level of concentration in a market; they may remove a maverick competitor who has destabilised past attempts at market co-ordination; they may create rivals with a greater

commonality of interest; or they may increase the visibility of pricing through downstream integration. In other circumstances, a merger which disrupts market conditions, e.g. by reducing the costs of the merged firm or eliminating a technology disadvantage, may disturb the terms of co-ordination and may make such co-ordination less likely.

5.158 When considering the likelihood of future co-ordination, the Commission will also consider any existing relationships between firms and the past history of market conduct, whether it has been characterised by price fixing, parallel pricing or vigorous price competition and how such conduct is likely to be affected by the merger.

NOTES

1. Australian Competition & Consumer Commission Merger Guidelines – A guide to the Commission's administration of the merger provisions (ss 50, 50A) of the Trade Practices Act. Revised July 1996.

2. United States Attorney-General's National Committee to Study the Antitrust Laws (1955), Report, p.320; quoted in Re Queensland Co-operative Milling Association Ltd and Defiance Holdings Ltd (1976), ATPR 40-012, at 17,245.

3. QCMA, op.cit., at 17, 246.

4. Or any other aspect of the competitive process or its performance outcomes.

5. Kaysen and Turner (1959), Antitrust Policy, p.75; Queensland Wire Industries Pty. Ltd. v. The Broken Hill Proprietary Company Limited & Anor (1989) ATPR 40-925, at 50,015.

6. Senate Standing Committee on Legal and Constitutional Affairs (1991), Mergers, Monopolies and Acquisitions: Adequacy of Existing Legislative Controls (AGPS, Canberra, 1991), p.39.

7. Hansard, Tuesday 3 November 1992, p.2406.

8. Dandy Power Equipment Pty. Ltd. v. Mercury Marine Pty. Ltd. (1982), ATPR 40-315, at 43,887-43,888.

9. Trade Practices Legislation Amendment Bill 1992: Explanatory Memorandum, para.12, p.4.

10. Hansard, 10 December 1992, p.4776.

11. Alternatively, an acquisition may increase the competitiveness of the acquiring firm but diminish the level of competition in the market.

12. "Anticipating the 21st Century: Competition Policy in the New High-Tech, Global Marketplace" Volume 1, A Report by the Federal Trade Commission Staff, Antitrust & Trade Regulation Report, Vol.70 No.1765, Special Supplement, June 6 1996, p.S-36.

13. Trade Practices Commission v. Australian Meat Holdings (1988), ATPR 40-876; and Australian Meat Holdings Pty Ltd v. Trade Practices Commission (1989), ATPR 40-932.

14. See R. D. Willig (1991), "Merger Analysis, Industrial Organization Theory, and Merger Guidelines", Brookings Papers: Microeconomics.

15. Note that the 'four firm concentration ratio' is applied to the relevant market, not the industry as traditionally calculated by the Australian Bureau of Statistics.

16. These thresholds have been set at a more generous level than those in other jurisdictions with a similar merger law. For example, the Canadian Director of Investigation and Research, Competition Act, Merger Enforcement Guidelines (1991) employ a CR4 threshold of 65 percent, with the merged firm's market share at 10 percent, and a single firm market share of 35 percent. The United States Department of Justice and Federal Trade Commission's Horizontal Merger Guidelines (1992) employ the Herfindahl-Hirschman Index (HHI) instead of the CR4, but would examine mergers where the post-merger CR4 was below 75 percent; and the single firm market share threshold is 35 percent. The New Zealand Commerce Commission's draft guidelines employ a 40 percent market share threshold under a dominance test.

17. Capacity can also be a useful measure of concentration in some markets for differentiated products. The Commission has indicated that in considering the acquisition of radio stations, it will attach particular

significance to the number of licences held by the merged firm in relation to the total number of licences available in the market, because of the volatility of individual audience and revenue shares. See Market definition and competition issues in commercial broadcast radio, June 1994.

CANADA

1. Employing Merger Review to reduce the probability of anticompetitive co-ordinated effects

a. *Can mergers be blocked under your law because of anticipated anti-competitive "co-ordinated effects". Do such co-ordinated effects include more than would be actionable under your law as prohibited anti-competitive agreements or abuse of dominance/monopolisation? If so, please identify the extra effects reached*

Under section 92 of the *Competition Act*[1], mergers can be blocked because of anticipated co-ordinated effects, although the Competition Bureau uses the term "interdependent behaviour". The *Act* directs the Tribunal to order the dissolution of a completed merger or prohibit the consummation of a proposed merger if it finds that the merger "prevents or lessens, or is likely to prevent or lessen, competition substantially." The Bureau's most important statements about how it will evaluate the competition implications of mergers are contained in the Merger Enforcement Guidelines ("MEG's"), issued in 1991, and in the Merger Enforcement Guidelines as Applied to a Bank Merger (BMEG's"), issued in 1998 after extensive external consultation.

Section 2.2 of the MEGs states that "(A) merger can lessen competition in two different ways. The first is where it is likely to enable the merged entity to unilaterally raise prices in any part of the relevant market. The second is where it is likely to bring about a price increase as a result of increased scope for interdependent behaviour in the market." By putting control of more output into the hands of a single firm, a merger can allow a firm to exert more influence over market price; the resulting price increase is referred to as a unilateral effect. Interdependent effects can arise when a merger increases concentration in a market, allowing remaining firms to compete less aggressively.

Canadian jurisprudence has provided little guidance as to the nature of prospective interdependent behaviour that would provide the grounds for blocking a merger under s. 92. The Bureau has alleged a substantial lessening of competition on the basis of interdependent behaviour in only one application to the Competition Tribunal opposing a merger, this being the *Imperial Oil/Texaco* merger[2]. The Bureau expressed a concern that vertical integration into downstream marketing by major refiners increased the likelihood that competition would be lessened substantially as the result of interdependent behaviour. Because the major refiners were vertically integrated, it was alleged that it was easier for them to monitor the prices charged by competing refiners to independent distributors.

The Competition Tribunal found that there were no close substitutes for gasoline, and noted that the gasoline market must be considered from both the retail and the wholesale perspective. Because the merger would increase the concentration of refinery capacity and terminal facilities for storage and access to alternative sources of supply, it may have an impact on wholesale supply, and an increase in concentration of branded retail outlets could affect the retail segment of the market. There were three distinct geographic markets at the wholesale level: the Atlantic region, Ontario/Quebec, and western Canada. At the retail level, geographic markets were urban areas, although this market definition had as much to do with administrative convenience as with economic realities.

Because the application was accompanied by a draft consent order (agreed to by Imperial), the Tribunal did not find it necessary to evaluate the Bureau's allegations that the merger, should it be allowed unaltered, would substantially lessen competition because it would increase the likelihood of interdependent behaviour in the market.

The increased likelihood of interdependent behaviour was among the concerns of the Bureau in its review of the recent bank mergers. The Commissioner explained his conclusions on the effects of the mergers in a letter to the Chairmen of the Bank of Montreal and the Royal Bank of Canada, which in part reads as follows:

> "The Bureau has examined the proposed transaction to determine the potential for a substantial lessening of competition through the exercise of interdependent behaviour at both local and national levels. This lessening can result from either explicit agreements or from implicit recognition among firms that, in the new post-merger environment, reduced competitive vigour would be more profitable for all.
>
> A small number of sellers in any one market increases the risk of interdependent behaviour, and the Bureau has determined that the proposed merger significantly increases concentration in an already concentrated industry. If both proposed mergers proceed, the number of major banks will decline from five to three, and concentration will be even higher. A high level of concentration in the relevant market is a necessary, but not sufficient, condition for determining whether or not interdependent behaviour is likely to substantially lessen or prevent competition.
>
> Other factors that facilitate interdependent behaviour are high barriers to entry, the homogeneity of products, the predictability of demand and costs, the stability of market shares, good information about pricing and customers, and the degree of industry co-operation (e.g. in associations, joint ventures, alliances, networks and loan syndicates). To a large degree, these factors appear to be present in this industry.
>
> It is important to note that the Bureau does not believe that collusion in banking is likely, given the repercussions such conduct would have if detected. However, in view of the expert advice received by the Bureau on this issue, there is concern that the proposed merger will increase the risk for reduced competitive vigour among the remaining major banks. This risk is compounded should the other proposed merger also proceed."

Note that the Commissioner was not concerned that the increase in concentration in banking markets would result in explicit agreements among banks to increase prices or restrict output. Rather, his concern was that a reduction in the number of banks would create incentive for firms to behave less aggressively when competing with other banks and financial institutions.

b. *What are the structural and behavioural factors that your agency considers to be especially pertinent in analysing the probability that a merger will produce anti-competitive co-ordinated effects? Which of these are the most important? Why?*

Before proceeding with a full analysis of the competitive effects of a merger when there are concerns with respect to co-ordinated effects, the Bureau first determines the degree of concentration in the relevant market. The Bureau will not normally challenge a merger where the four firm concentration ratio post-merger would be less that 65 percent or if the merged entity would have a share of less than 10 percent. Furthermore, barriers to entry that would prevent entry into the market in response to an attempt to exercise market power on the part of firms in the market must be present before the Bureau will seek to block a merger.

When these thresholds are exceeded and there are significant barriers to entry, the Bureau will determine whether other conditions exist which permit remaining firms in the market to reach and monitor explicit agreements or tacit understandings, and punish deviations from co-operative arrangements. The BMEGs are more explicit than the MEGs in their discussion of the factors that increase concerns related to interdependent behaviour post-merger. According to the BMEGs, "(T)he term 'interdependent behaviour', also known as co-ordinated behaviour, refers to conduct by a group of firms that is profitable for each of them only because of the accommodating co-operative conduct of the others. Such behaviour is more likely in markets in which firms can recognise and reach a co-operative understanding, monitor one another's behaviour, and respond to any deviations from the co-operating behaviour by others. This type of behaviour may include tacit or explicit agreements on price, service levels, or any other dimension of competition." (para. 65)

The BMEGs list the factors that can affect the ability of firms to detect and successfully deter deviations from a co-operative understanding, as follows:

i. transparency of the terms of market transactions. When prices are transparent to market participants, deviations are more easily detected;

ii. stability of underlying costs. When costs fluctuate, it may be difficult to determine whether a price change represents a deviation from an understanding or is rather a response to a change in

iii. cost conditions;

iv. size and frequency of product sales. When sales occur in large discreet blocks and a relatively infrequent, then deviations from understandings are relatively more profitable and effective deterrence of deviation is more difficult; and,

v. multi-market exposure. When firms participate in multiple geographic or product markets, there are greater opportunities to discourage firms from deviating from the co-operative understanding.

The Bureau will also "examine whether there is a history of market participants having engaged in interdependent behaviour in the past. The effect of 'maverick' firms, who may impede successful co-ordination, will also be considered."

c. *Some countries prohibit mergers which have the effect of creating or strengthening a dominant position ("dominance test") while others have opted for a substantial lessening of competition (SLC) standard. Still others apply both tests and at least one has alternated between the standards. It is also worth noting that many if not all countries employing a dominance test have widened its scope by defining "dominance" to include joint or collective dominance.*

i. *What are your agency's views as to the relative merits of the dominance and SLC standards in relation to the power to block mergers predicted to produce unacceptable anticompetitive co-ordinated effects?*

The Competition Act directs the Competition Tribunal to order the dissolution of a completed merger or prohibit the consummation of a proposed merger if it finds that the merger "prevents or lessens, or is likely to prevent or lessen, competition substantially". Application of the SLC standard has not generated significant controversy in Canada, and we are not aware of any arguments that have been made in favour of a dominance standard.

ii. *If not already addressed under issue 2, supra, and if your merger review process employs the joint/collective dominance concept, what factors and analysis are appealed to in order to demonstrate that a group of firms is jointly/collectively dominant?*

Not applicable

NOTES

1. 92. (1) Where, on application by the Commissioner, the Tribunal finds that a merger or proposed merger prevents or lessens, or is likely to prevent or lessen, competition substantially

(a) in a trade, industry or profession,

(b) among the sources from which a trade, industry or profession obtains a product,

(c) among the outlets through which a trade, industry or profession disposes of a product, or

(d) otherwise than as described in paragraphs (a) to (c),

the Tribunal may, subject to sections 94 to 96,

(e) in the case of a completed merger, order any party to the merger or any other person

(i) to dissolve the merger in such manner as the Tribunal directs,

(ii) to dispose of assets or shares designated by the Tribunal in such manner as the Tribunal directs, or

(iii) in addition to or in lieu of the action referred to in subparagraph (i) or (ii), with the consent of the person against whom the order is directed and the Commissioner, to take any other action, or

(f) in the case of a proposed merger, make an order directed against any party to the proposed merger or any other person

(i) ordering the person against whom the order is directed not to proceed with the merger,

(ii) ordering the person against whom the order is directed not to proceed with a part of the merger, or

(iii) in addition to or in lieu of the order referred to in subparagraph (ii), either or both

(A) prohibiting the person against whom the order is directed, should the merger or part thereof be completed, from doing any act or thing the prohibition of which the Tribunal determines to be necessary to ensure that the merger or part thereof does not prevent or lessen competition substantially, or

(B) with the consent of the person against whom the order is directed and the Commissioner, ordering the person to take any other action.

(2) For the purpose of this section, the Tribunal shall not find that a merger or proposed merger prevents or lessens, or is likely to prevent or lessen, competition substantially solely on the basis of evidence of concentration or market share.

2. CT-89/3, no 390, January 26, 1990.

FINLAND

1. Nature of the implicitly collusive oligopoly problem in Finland - Putting the problem into perspective

Since the 1950's, the Finnish industrial structure has been relatively highly concentrated. An oligopoly with one or few large companies and a fringe of small firms has been a typical market structure. Basically, this has been due to Finland's geographical location in Europe and its economic history as a small closed economy. Additionally, competition was not previously emphasised as an essential feature of the economy – for a long time, competition policy was secondary to price controls, which were enforced until 1988.

Competition policy thus attracted minor attention in Finland until the late 1980's, although Finland adopted its first competition law in 1958. Since then, the development of Finnish competition law has been relatively rapid. The current legislation, which entered into force in 1992 and was last amended in 1998, already constituted the sixth major revision of the law in only 40 years.

As late as the 1980's, Finland faced a relatively large number of cartels and companies in a dominant position. In most cases, the enforcement of competition policy was of minor proportions only. The late 1980's marked a culmination in the substance and status of Finnish competition policy. The reform of competition legislation in 1988 finally removed obstacles from the invigoration of competition policy. The new Act on Competition Restrictions was enacted, where cartels were still tackled under the abuse principle. In the same year, the Finnish Competition Authority was established and it adopted, as one of its main aims, the dissolving of the cartels which had been registered under the previous competition act.

The Finnish Competition Authority dissolved ca. 100 previously registered cartel agreements during its first five years of operations, without a per se prohibition. Then, a cartel prohibition was included in the 1992 Act on Competition Restrictions (hereinafter the Competition Act).

While dissolving cartels, the Finnish Competition Authority also had to react to the market dominance problem. Similarly, there was a high degree of restrictive regulation in action in the beginning of the 1990's. For example, regulatory barries to entry were highly significant in several industries and, consequently, the Finnish Competition Authority has presented several deregulative proposals to different ministries during the 1990's.

So far, when Finnish competition policy has been implemented, no major attention has been paid to the oligopoly problem. The dissolving of the cartels and the development of competition policy regarding market dominance tied up a large amount of the resources of the Finnish Competition Authority.

In retrospect, another main reason why the oligopoly problem has not become a significant policy issue in Finland was probably the deep recession at the start of the 1990's, whose effects for collusive prospects were highly significant until 1995. During low demand or recession, it is difficult to maintain collusion, since the companies have a great incentive to increase their production or to lower prices to increase their market share.[1] Some of the major industries in Finland were still concentrated in the

beginning of the 1990's. These industries were oligopolies with relatively many symmetric companies which could not well observe each other's price or production information.[2] These companies had to face the new per se prohibitive legislation with a great demand uncertainty, so tacitly collusive schemes would have been very difficult to perform.

There is empirical evidence which confirms the statements made above on the Finnish economy. Due to the structure of many industries in Finland, quite high markups were a common feature in the 1980's. High markups imply that these industries have been able to achieve supracompetitive prices. However, in the 1990's, markups have declined but are still relatively high in some industries. E.g. the concentrated retail fuel market faced both national and local price wars in the beginning of the 1990's, as it is an industry where the monitoring of competitors is easier and reaction times are shorter than in many others.

2. Using prohibitions on horizontal agreements to attack co-ordinated pricing or other behaviour harming consumers

Article 6 of the Finnish Competition Act (480/1992) prohibits horizontal agreements and has been applied since 1 March 1993. It is illegal by virtue of an agreement, a decision or a corresponding practice to fix or recommend the prices, limit production or share the markets or purchases. The prohibition on explicit horizontal agreements is also designed to cover horizontal price or other agreements which are carried out in a "tacitly collusive" way. Oligopolistic behaviour, e.g. dicriminatory acts other than pricing, and oligopolistic exclusionary behaviour, e.g. collective boycotts, are likewise prohibited.

However, according to subparagraph 2 of Article 6, limiting production or dividing the market or sources of supply is allowed if this is essential for arrangements which may be shown to boost production or distribution or to promote technical or economic development. The benefit of the arrangement shall primarily accrue to the customers or consumers.

The Finnish Competition Authority's Guidelines (1992) on Article 6 discuss other ways of harmonising the behaviour of companies and restricting competition through various agreements or information exchange. These ways could also be interpreted as "facilitating practices".

The Guidelines examine the illegality of specialisation agreements when they aim at restricting competition e.g. by limiting production or dividing customers/markets. In the assessment of competition restrictions contained within specialisation agreements, the main criterion is whether the agreements are intended solely for specialisation or boosting production and that they are inevitable for the realisation of the agreement.

Information exchange related to a horizontal competition restraint is forbidden if, by means of mutual information exchange or information exchange agreements between companies operating on the same production or distribution level, the companies' operational freedom is limited or their market behaviour co-ordinated. Information exchange between business undertakings shall be assessed on a case-by-case basis. If the information exchange contains concrete recommendations or conclusions are drawn on the basis of it to harmonise the behaviour of companies with respect to pricing, production, or sharing of markets or purchases, such information exchange agreements and corresponding arrangements are seemed to violate the prohibition of Article 6 of the Competition Act.

Joint ventures between companies operating on the same horizontal level may also be considered violations of Article 6.[3] Co-operation realised via a joint venture is likely to be forbidden if the founding companies e.g. limit their own production to some extent or make a commitment not to compete with each other or with a joint venture.

Discussion

In the Finnish case law, no decisions on horizontal collusion have so far been made where the evidence would be solely circumstantial, and no tacit collusion cases have been referred to the Competition Council.[4] On the basis of case law, it would thus seem to be difficult to prove tacit collusion with mere circumstantial evidence.[5]

At the moment, there is an increasing need to analyse the problematics involved in tacit collusion. This is based on several facts. The Finnish industrial structure has changed in the recent years, mainly due to Finland's membership in the European Union. Finnish industries are now increasingly facing European or even international competitors in their national markets, and the incentive to block entries through co-operation is high for the domestic incumbents. In many dynamic industries, firms are forming horizontal networks of independent companies in order to improve their joint efficiency against foreign or domestic competitors. Competition authorities will face a demanding task in identifying and analysing these efficiency effects and the possible restrictive effects.

Signals have come to the attention of the Finnish Competition Authority of an increasing oligopoly problem in the Finnish markets. Exemptions have been sought for a number of horizontal agreements, based on the efficiency effects accruing to the consumers. These exemption applications undergo careful scrutiny and the facilitating practices are controlled through imposing conditions on the exemptions.

3. Applying prohibitions of "monopolising behaviour" or abuse of dominance in order to attack co-ordinated pricing or other behaviour harming consumers

A dominant position provides a company with the possibility to operate irrespective of incumbent or potential competitors, customers and suppliers. What is decisive is that the company can appreciably direct the price level or terms of delivery. The other parties cannot markedly affect, by their own measures or reactions, the market power of a dominant company.

Oligopolists may also try to monopolise a market through collective dominance. In the Finnish competition legislation, the definition of collective market dominance centers on companies' behaviour, i.e. whether the companies may be seen to form a kind of uniform organisation which operates like an independent business undertaking.

3.1 Legal basis for joint/collective dominance and the commentary to the Government Bill for the Competition Act

Article 3, paragraph 2, of the Competition Act mentions the possibility of dominance by an association of business undertakings, and a further discussion thereon can be found in the commentary to the Government Bill. According to the commentary, an association of business undertakings refers to a group of business undertakings operating in the market in a uniform manner. The joint activity is organised in such a way that it cannot be considered wholly temporary.

To mention an association of business undertakings in Article 3(2) seeks to clarify that market dominance may, in certain cases, be collectively held by more than one business undertaking. The legal assessment shall be based on the economic content of an arrangement and not on its legal form, and a group of business undertakings may also be considered an association of business undertakings if they may be shown to operate for a common purpose and by jointly confirmed ways. Mere conformity of behaviour

e.g. in an oligopolistic market structure is not sufficient, however; the existence of an association referred to in Article 3(2) requires wilful, systematic co-operation.

An association of business undertakings is covered by Article 3(2) only when its activities are such that it may fulfil the material criteria presented in the law. This requires that the association monitors or co-ordinates the behaviour of its members in the markets, i.e. that it is "a cartel", a trade association or a sales organisation by nature.

Discussion

The Finnish case law is sparse on collective oligopolistic market dominance. In a couple of cases,[6] the Competition Council and the Supreme Administrative Court have deliberated on the possibility of collective dominance but only in one case (Normilk, 1996) has joint market dominance been established. The Supreme Administrative Court based its decision on joint dominance on a mutual co-operation agreement whereby a tight collaboration was established in milk collection and the production and marketing of dairy products. Ownership ties and other contractual arrangements between the parties were also related to this. A high product-specific and regional market share was also established.

4. Employing merger review to reduce the probability of anticompetitive co-ordinated effects

The control of concentrations was introduced in Finland only recently. The relevant provisions entered in force on 1 October 1998. By March 1999, the Finnish Competition Authority has received 18 notifications, but none of the cases is illustrative of the oligopoly problem.[7]

4.1 Legal basis for the control of concentrations

The acquisition of control, the acquisition of business operations or a part thereof, a merger and a setting up of a joint venture which shall perform on a lasting basis all the functions of an autonomous economic unit are concentrations, as defined by Article 11 of the Competition Act.

The provisions on the control of concentrations apply when the combined turnover of the parties to the concentration exceeds FIM 2 billion and the turnover of a minimum of two parties exceeds FIM 150 million. The application of the provision also requires that the object of the acquisition or a joint venture to be established conducts business in Finland.

If, as a result of the concentration, a dominant position shall be created or strengthened which appreciably impedes competition in the Finnish markets or a significant part thereof, the Finnish Competition Authority can impose conditions for the implementation of the concentration. The Finnish Competition Authority negotiates about conditions with the parties involved but is not, in principle, dependent on the parties' proposals. If the harmful effects of a concentration may not be eliminated by attaching conditions, the Finnish Competition Authority may propose to the Competition Council that the concentration be banned.

The Commentary to the Government Bill regarding Article 11 does not deal with the oligopolistic joint dominance problem. However, there is a reference to Article 3(2)[8] of the Competition Act where dominance is defined. Hence, potential joint dominance problems of a concentration may also be examined in the context of the control of concentrations.

4.2 Guidelines of the Finnish Competition Authority on the control of concentrations

The Guidelines of the Finnish Competition Authority on the control of concentrations (1998) discuss how to evaluate concentrations and possible positions of joint dominance. Article 11d of the Competition Act does not distinguish between whether a dominant position is obtained by a company on its own or jointly. A high level of cross ownership and special contractual arrangements may be considered strongly indicative of joint dominance.

The evaluation of a significant impeding of competition is always done on a case-by-case basis and may be affected by the relative size of the concentration in the market, its economic and financial strength, the negotiating power of customers and suppliers, or the foreseeable development of the markets and the speed with which it happens.

Discussion

To recapitulate, the Finnish control of concentrations is based on the evaluation of the creation or strengthening of a dominant position. A dynamic analysis is required of the evaluation. In addition to resulting market dominance, a major obstruction of competition is required before a concentration may be blocked. The legislator has set a high threshold to the blocking of a concentration and has primarily sought to affect concentrations through the setting of conditions.

In the commentary to the Government Bill's provisions on the control of concentrations, possible joint dominance and its effects have not been discussed. In the report of the working party set up by the Ministry of Trade and Industry to prepare the latest amendment of the competition legislation, it is stated, however, that in oligopolistic markets, a concentration increases the risk of collusion between companies. It is expressly mentioned that one criterion of evaluation should be potential joint dominance.

5. Conclusion

The Finnish competition legislation and the commentaries to it display a fairly standard position in dealing with the oligopoly problem. The Finnish Competition Authority has the same legislative tools to tackle the possible oligopoly problem as most other competition authorities in Europe. The Finnish competition legislation covers all three aspects relevant to the oligopoly problem discussed in the paper: tacit collusion, abuse of joint/collective dominance and merger control.

However, the lack of case law implies that tacit collusion or collective dominance seems not to have caused major problems in Finland. In retrospect, it appears that due to structural and institutional factors, the problems involved with explicit collusion and market dominance and the abuse thereof have been more important than the oligopoly problem in Finland. The Finnish Competition Authority has been dealing with a great number of dominance cases and the abuse thereof in the past five years, and now, also, with a relatively high number of merger cases.

Nevertheless, there are many indicators in the Finnish economy, which attest that the oligopoly problem is becoming more relevant. Companies in Finland and in Europe have been reconstructing their strategies through an increasing number of mergers and acquisitions. This would speak for a more sensitive attitude towards the oligopoly problem. Also, the launching of the control of concentrations to Finland adds relevance to the potential market dominance of oligopolistic companies.

NOTES

1. See, e.g., Green and Porter (1984): Non co-operative Collusion Under Imperfect Price Information.

2. It can be stated that many industries in Finland in the beginning of the 1990's can be considered highly analogous to that studied by Stigler (1964) or Green and Porter (1984). In some cases, the monitoring problems were previously solved by forming cartels, e.g. in the paper industry.

3. When they do not fall within the sphere of the control of concentrations.

4. In one decision, the Finnish Competition Authority suspected tacit collusion in the dental hygiene market. This was based on parallel pricing between the companies, the monitoring of competitors, potential division of markets and a previously established price co-operation. However, based on circumstantial evidence obtained during an inspection, sufficient proof of collusion was not found.

5. The Competition Council has accepted circumstantial evidence as a partial proof of a horizontal price cartel in some cases, but only together with direct evidence of a cartel agreement.

6. In one case, the Finnish Competition Authority found that the Forest and Park Service and the Finnish Forest Research Institute had joint dominance as landlords of ten major skiing resorts in Northern Finland.

7. The first case to test the new legislation and the Guidelines of the Finnish Competition Authority on the control of concentrations was notified only recently. Unfortunately, it is too early to discuss its implications.

8. Cf. paragraph 20.

GERMANY

1. Principles and criteria

Oligopolies which are exposed to no, or only a limited degree of, competition pose a significant problem for competition policy and the enforcement of cartel law. German law covers market dominance - within the framework of merger control and abuse supervision - in the form of single-firm market dominance and oligopolistic market dominance. Section 19 (2) sentence 2 of the ARC defines the latter as follows: "Two or more undertakings are dominant insofar as no substantial competition exists between them with respect to certain kinds of goods or commercial services and they jointly satisfy the conditions of sentence 1." Under Section 19 (3) sentence 2 of the ARC, an oligopoly is presumed to be dominant if it:

- consists of three or fewer undertakings reaching a combined market share of 50 percent, or
- consists of five or fewer undertakings reaching a combined market share of two thirds.

These presumptions are, however, rebuttable. For this purpose, it is not the competition authority, but the undertakings concerned which must demonstrate that "the conditions of competition may be expected to maintain substantial competition between them, or that the number of undertakings has no paramount market position in relation to the remaining competitors".[1]

In the field of merger control the emphasis of the examination lies on the structural conditions for future competition and their effects on the competitive process. The market structure must be expected to maintain effective competition even after the merger.

2. Important structural features in examining oligopolistic market dominance

None of these structural features in itself can draw one to the conclusion that collective market dominance exists. This can only be the result of an overall assessment of all the structural features.

2.1 Market share

A large combined market share among a few undertakings may indicate that they form a dominant group and that a situation exists which poses a danger to competition. Whether an interdependence of parameters i.e. an oligopolistic interdependence actually exists among the undertakings is, however, to be assessed using other structural data related to the undertakings and to the market. Apart from the market shares, these include the differences between market shares, the financial resources of the undertakings and their access to the supply and sales markets. If there have been no significant market share fluctuations between the oligopolists in a given period, this may point to an uncompetitive oligopoly. This is true, in particular, if market shares have remained stable despite significant changes in external market circumstances, such as a substantial drop in demand. If a dominant oligopoly already exists, the merger between two of its members or between an oligopolist and an outsider will lead to the oligopoly becoming even tighter. The tighter the oligopoly is, the more transparent competitive conduct will become and the easier it will be for conscious parallelism to occur.

2.2 Symmetry of the oligopoly

The greater the similarity between the economic and market-relevant structural features of the oligopolists are, the more likely conscious parallelism will be. Such parallelism can also take the form of parallel predatory practices vis-à-vis outsiders.

A symmetrical oligopoly consisting of firms with largely similar market shares, comparable resources and a comparable ease of access for all the oligopolists to the supply and sales markets is at risk of being uncompetitive since any competitive moves would be equally perceptible to all firms, easily detectable due to the transparency of competitive conduct and hardly promising because all the firms have a similar retaliatory potential.

The structural asymmetry of oligopolies, on the other hand, is not in itself a sufficient indication of substantial competition among the oligopolists, although a greater likelihood of individual competitive conduct does exist with asymmetrical oligopolies.

2.3 Interlocks

The probability of conscious parallelism is increased with interlocking directorates, interlocking capital arrangements or other links between the oligopolists. One example of this is if the members of an oligopoly are linked by a joint venture in the market in which the concentration occurs. Cartels, co-operation or customer-supplier relationships among the oligopolists can, however, also bring about restraints of competition.

2.4 Barriers to market entry

High entry barriers to a market as a rule indicate that potential competition is not very important. High barriers to market entry can for example consist of administrative restrictions of market entry (e.g. entry restrictions for environmentally harmful plants or drugs), actual restrictions such as limited resources concentrated only in the hands of the members of the oligopoly, economies of scale in various departments (R&D, production, marketing), a large degree of vertical integration of the members of the oligopoly, exclusive dealing contracts of the oligopoly members with their respective customers, demarcation and concession agreements, industrial standards as well as of high advertising and inter-brand competition in a market. Oligopolies tend to be more contestable in new and dynamically growing markets than in stagnating or declining markets with overcapacities since the former offer greater opportunities to achieve profits. But this is not the case if certain barriers to market entry exist (patents, licences). If market entry did not occur, or was not successful, in the past despite objectively good opportunities, this may indicate a dominant oligopoly and acts as a deterrent to enterprises that would in principle be interested in entering a market.

2.5 Competition from imperfect substitutes

Competition may come from goods and services which, although in the eyes of buyers they are not equivalent to those of the market concerned, may replace them to a limited extent or under certain conditions. Competition from imperfect substitutes can only be assessed as residual competition. The disappearance of the rival supplier of a substitute as a result of a merger with an oligopolist operating in the market concerned can only strengthen an already existing market dominant position but not result in creating it. Existing competition from imperfect substitutes can preclude the presence of a paramount market position only in exceptional cases.

2.6 Potential competition

The extent to which potential competition may be considered depends on how easily it is to forecast its effects on the competitive process.

2.7 Buying power on the opposite side of the market

The likelihood of oligopolistic market domination increases in proportion to the degree of fragmentation of the other side of the market. Relatively large buyers can disrupt the oligopolistic discipline by playing the members of the oligopoly off against each other and causing them to engage in secret competition. This is particularly the case if demand is irregular or takes the form of large individual orders. Large buyers also increase the transparency of the market, however, which in turn favours the conscious parallelism of the oligopolists.

2.8 Market phase

Dominant positions are in principle more likely to exist in the maturity and stagnation phases of a market than in the experimental and growth phases. Economies of scale and the importance of brands do not as a rule constitute barriers to market entry in the early market stages. A superior scope of action is, however, also possible in early market phases if a merger results in a market barrier to potential competitors.

2.9 Overall assessment

All the structural criteria are to be assessed in their totality. The emphasis is placed on the market shares, barriers to market entry, interlocks and the market phase. The greater the likelihood of conscious parallelism appears on the basis of these criteria, the more evidence is needed to refute the presumption of a dominant oligopoly. If as a result of an examination of the conditions of competition it appears that there is no indication of a dominant oligopoly, the competitive process need not be examined further. If such indications do exist, however, it must be examined whether, and to what extent, the members of the oligopoly actually make use of possible parameters of competition. The more homogeneous the products are in a specific market (e.g. cement), the less likely it is that quality competition is present. There is often no price competition under these conditions due to the high degree of oligopolistic interdependence among the suppliers. That is why residual competition in the form of competition in services, terms, R&D and the provision of advice to customers is particularly important. On the other hand, competition in terms of price and quality currently often exists in the case of heterogeneous products. The trend to oligopolistic behaviour is less in this case. If the conditions of the oligopolistic presumption are satisfied, the existence of substantial competition before the merger is not sufficient to refute the presumption of market dominance. It has to be proved that it is very likely to exist also in the future. If no substantial competition is evident even in the oligopoly, it is also less likely that it will exist in the relationship to the oligopoly outsiders. The conscious parallelism in the oligopoly could otherwise not be sustained in the long run.

3. Experience of the Bundeskartellamt in dealing with oligopolistic dominance in the context of merger control

Each year the Bundeskartellamt examines a large number of cases which formally meet the conditions of the qualified oligopoly presumption. In the context of prohibitions oligopoly does not feature prominently. The following detailed descriptions of (1) the "Bertelsmann/Kirch/Premiere" case (BKartA, decision of 1 October 1998) and (2) the "Philips/Lindner" case (BKartA, decision of 11 August 1994, WuW/E BKartA 2669) are examples of prohibitions:

1. In 1998 the Bundeskartellamt vetoed the proposed increase of stakes in the leading German pay-TV channel Premiere by Bertelsmann and KirchGruppe. This merger would have resulted in the French pay-TV provider Canal+ withdrawing from the circle of Premiere shareholders and transforming Premiere into a joint venture owned on a 50:50 basis by the remaining shareholders CLT/UFA (Bertelsmann) and KirchGruppe. The proposed transaction was an essential part of the "Bertelsmann/Kirch/Premiere" deal which was notified to the EU Commission in December 1997 and blocked in May 1998.

   Apart from the fact that Premiere already has a dominant position in the German pay-TV market, which was likely to be strengthened due to the proposed merger, the Bundeskartellamt assumed a spillover effect to occur in the traditional German TV market (free-TV). CLT/UFA and KirchGruppe are leading companies in the advertising-funded free-TV market with the SAT.1, DSF, PRO 7 and Kabel 1 channels (Kirch) on the one hand and RTL, RTL 2, Super RTL, VOX (CLT/UFA) on the other. Together both groups account for a share of approx. 90 percent of the German TV advertising market.

   In the view of the Bundeskartellamt the withdrawal of Canal+ from the circle of Premiere shareholders would have given the remaining two shareholders new opportunities of co-ordinating their pay-TV and free-TV interests. This would not only have strengthened their dominant position in the pay-TV market but would also have created or strengthened a dominant oligopoly in free-TV.

   CLT/UFA and KirchGruppe own the most important rights to free-TV and pay-TV programming. After the transformation of Premiere into a joint venture both companies would have been able to benefit further from the combined purchase of free-TV and pay-TV rights as well as to optimise their programming strategies in free-TV and pay-TV. As a result of such co-ordination concerning the free-TV market the competition currently existing in the TV advertising market would have been significantly restricted, if not eliminated.

2. The "Philips/Lindner" case involved a prohibition based on the qualified oligopoly presumption. Philips, one of the world's biggest electronics companies, intended to acquire a share in Lindner, a medium-sized manufacturer of lamps. In the Bundeskartellamt's view, the acquisition of an outsider would have strengthened the dominant oligopoly consisting of Philips and the Siemens subsidiary Osram in the market for general lighting service lamps. Philips and Osram together held a market share of almost 80 percent, with Philips and Osram accounting for 25 and 50 percent respectively. Although there was a big difference between the market shares of Philips and Osram, the other competitive conditions as well as the competitive conduct did suggest conscious parallelism of the two firms. The degree of concentration of the oligopoly was very high. There was a big difference between the market shares of the oligopolists and the other competitors. Philips and Osram had access to all relevant technologies and both offered a full range of lamps. The high market shares held by Philips and Osram had been stable for years, and so were the market shares of their competitors. The market situation had therefore remained largely unchanged and conscious parallelism was to be expected. In addition, 10 percent of the lamp manufacturing costs were pooled owing to a joint venture for the manufacture of lamp parts. Finally, Philips and Osram had concluded a cross-licensing agreement for general lighting service lamps. As a result, innovative competition between Philips and Osram was largely restricted.

   All these links between the oligopolists pointed to the presence of conscious parallelism. Moreover, the relevant market for general lighting service lamps was characterised by a declining volume, while innovative competition was present in marginal areas only. In such a

situation price competition would benefit none of the oligopolists, but reduce profit margins since instant responses would have to be expected. The barriers to market entry were considered to be high for potential competitors. In view of the retailers' limited shelf space, either of the two big brands, or both, but rarely any other brands, are listed. Entry by non-European competitors was not very likely in view of high transport cost. There was no effective competition from substitutes, simply because Philips and Osram are leaders also in the markets for substitutes. The opposite side of the market is in addition less highly concentrated.

The analysis of the competitive process did not produce a divergent appraisal. Philips' and Osram's prices, which differed very slightly, exceeded those charged by outsiders by 20 percent. The acquisition of an outsider therefore constituted a structural deterioration.

4. Summary

- under German law, abuse supervision and merger control explicitly not only cover single-firm market dominance but also oligopolistic (or "collective") market dominance. The latter presumes that a few undertakings with considerable market shares are present in the market, that no substantial competition exists among them and that they have a paramount market position in relation to outsiders;

- the oligopoly presumption of Section 19 (3) of the ARC can be rebutted by the undertakings concerned. For this purpose they must demonstrate that the conditions of competition may be expected to maintain substantial competition between them also in the future, or that the oligopoly overall has no paramount market position in relation to the remaining competitors;

- the examination of oligopolies concentrates on the analysis of the structural conditions for future competition. Important structural characteristics which have to be examined are e.g. market share, symmetry or asymmetry, barriers to market entry, interlocks and market phase. All the criteria have to be assessed in their totality.

- oligopoly does not feature prominently in the decision-making practice of the Bundeskartellamt. This is true, in particular, of prohibitions in the field of merger control.

NOTE

1. The text of Section 19 of the Act against Restraints of Competition is attached to this paper. The Bundeskartellamt published a "Checklist for Merger Control Procedures" in 1989. The "Checklist" is currently being updated.

Annex

CHAPTER III

Market Dominance, Restrictive Practices

Section 19

Abuse of a Dominant Position

1) The abusive exploitation of a dominant position by one or several undertakings shall be prohibited.

2) An undertaking is dominant where, as a supplier or purchaser of certain kinds of goods or commercial services, it:

   1. has no competitors or is not exposed to any substantial competition; or

   2. has a paramount market position in relation to its competitors; for this purpose, account shall be taken in particular of its market share, its financial power, its access to supplies or markets, its links with other undertakings, legal or factual barriers to market entry by other undertakings, actual or potential competition by undertakings established within or outside the area of application of this Act, its ability to shift its supply or demand to other goods or commercial services, as well as the ability of the opposite market side to resort to other undertakings. Two or more undertakings are dominant insofar as no substantial competition exists between them with respect to certain kinds of goods or commercial services and they jointly satisfy the conditions of sentence 1.

3) An undertaking is presumed to be dominant if it has a market share of at least one third. A number of undertakings is presumed to be dominant if it:

   1. consists of three or fewer undertakings reaching a combined market share of 50 percent; or

   2. consists of five or fewer undertakings reaching a combined market share of two thirds, unless the undertakings demonstrate that the conditions of competition may be expected to maintain substantial competition between them, or that the number of undertakings has no paramount market position in relation to the remaining competitors.

(4) An abuse exists in particular if a dominant undertaking, as a supplier or purchaser of certain kinds of goods or commercial services:

   1. impairs the ability to compete of other undertakings in a manner affecting competition in the market and without any objective justification;

   2. demands payment or other business terms which differ from those which would very likely arise if effective competition existed; in this context, particularly the conduct of undertakings in comparable markets where effective competition prevails shall be taken into account;

3. demands less favourable payment or other business terms than the dominant undertaking itself demands from similar purchasers in comparable markets, unless there is an objective justification for such differentiation;

4. refuses to allow another undertaking access to its own networks or other infrastructure facilities, against adequate remuneration, provided that without such concurrent use the other undertaking is unable for legal or factual reasons to operate as a competitor of the dominant undertaking on the upstream or downstream market; this shall not apply if the dominant undertaking demonstrates that for operational or other reasons such concurrent use is impossible or cannot reasonably be expected.

ITALY

1. Introduction

Oligopoly theory shows that in a repeated interaction explicit and binding agreements are not needed to reach equilibrium outcomes in which firms gain supracompetitive profits. From an antitrust perspective it is important to understand whether antitrust laws provide legal means to curb firms' ability to co-ordinate tacitly their behaviour in a way that is likely to restrict competition and harm consumers. This report will focus on the application of the prohibition of agreements distorting competition contained in section 2 of the Competition Act (Law 287/1990) by the Italian Antitrust Authority to cope with the risk of tacit collusion among oligopolists.

The report is organised as follows: section 2 deals with the definition of antitrust infringements caught under the label "tacit collusion" and the problem of what is considered a legal proof of collusion by the Italian Antitrust Authority and the administrative courts. Section 3 contains a brief description of the major cases of tacit collusion detected by the Italian Authority and highlights the main features of the approach emerging from the Italian experience. Section 4 concludes.

2. Characterisation and detection

2.1 Characterisation

Three broad categories of antitrust violations are caught under section 2 of the Competition Act relating to the co-ordination among firms of otherwise competitive strategies. These are: agreements (properly called); concerted practices; and facilitating practices. In almost all cases of tacit collusion examined by the Italian Antitrust Authority, facilitating and concerted practices were both part of the allegations.

Agreements are reached by firms when their wills meet in forms that would be considered relevant according to the Italian corporate law, as they are concluded by persons who are qualified to act on behalf of their company and express its intention.

As for concerted practices, the definition given by the European Court of Justice in *Dyestuffs* has been adopted in the Italian legal system. It stated that a concerted practice is a "form of co-ordination between undertakings which, without having reached the stage where an agreement properly so-called has been concluded, knowingly substitutes practical co-operation between them for the risks of competition".

The binding or legal nature of the "meeting of wills" represents the crucial distinctive factor of an agreement versus a concerted practice. However, from an economic perspective the distinction between agreements and concerted practices is not so clear cut. The non-enforceable nature of restrictive agreements makes them unstable unless they are the outcome of a perfect equilibrium of a non-co-operative game. Therefore all the conditions that must be met in order for an agreement to produce its anticompetitive effects are exactly the same that must occur if firms stipulate to co-ordinate their conducts in a less formal way.

The third category, facilitating practices, differs from the two previous categories for the content of the co-operation: they do not regard directly the firms' market conduct, but rather aim to create conditions conducive to a collusive behaviour. The most recurrent instance of facilitating practices is the frequent exchange of detailed information among competitors.

2.2 Detection

The most difficult task in the application of antitrust legislation against tacit collusion is to prove the existence of an artificial form of co-ordination. Detecting collusion would be facilitated if firms and individuals had strong incentives to inform the antitrust authority of the restrictive practices they are involved in. Unfortunately, this is rarely the case and the Italian Antitrust Authority must rely on circumstantial and documentary evidence to prove the restrictions.

The first category of elements taken into account by the Antitrust Authority concerns the structural conditions of the market, i.e.: degree of concentration; barriers to entry; the existence of multimarket contacts, etc. The second category encompasses circumstantial and behavioural evidence, i.e.: price parallelism; stability of market shares; bidding strategies in several public tender procedures. Finally, documentary evidence, especially relating to the exchange of information, as described in the previous paragraphs, is often a decisive element of proof.

3. Cases

The Italian Antitrust Authority was called to enforce section 2 of the Competition Act against alleged tacit cartels in four cases. In January 1999 the Authority opened another case of alleged collusion which is still pending. They are briefly described in the following paragraphs.

3.1 Description of the main features of the cases

Table 1 summarises the most relevant features of these cases concerning market conditions and the behavioural aspects ascertained by the Italian Antitrust Authority.

Table 1

Features of the cartel	**Cases**			
	Steel pipes	*Security guards*	*Food containers*	*Record industry*
Number of firms	4	4	4	5
Entry barriers	yes	yes	yes	yes
Product homogeneity	yes	yes	yes	no
Public tenders	no	yes	no	no
Exchange of information	yes	no	yes	yes
Price parallelism	yes	yes	yes	yes
Paral. of other conditions	yes	yes	yes	yes
Stability of market shares	yes	yes	yes	no
Quota scheme	yes	no	no	no
Meetings (association)	yes	no	yes	yes

3.1.1 Producers of steel pipes

In December 1995 the Italian Antitrust Authority completed its investigation into alleged anti-competitive behaviour by Italy's main manufacturers of coated steel welded pipe used for natural gas mains (Tubi Dalmine Ilva, General Side Italiana, Arvedi Tubi Acciaio). It resulted that these companies had divided up the market between them by establishing a sales quota for each company and co-ordinated their pricing policies and other contractual terms and conditions. In particular, they had pooled their information on sales in order to jointly control any deviations from the historic benchmark figures they had agreed upon. Information on meetings held at the headquarters of *Federacciai*, the industry association, at which the companies discussed their pricing policies and the new price lists for welded steel pipe to be used for pipelines, was of particular importance.

Considered the gravity and the duration of the infringement all companies involved were fined one percent of their turnover.

3.1.2 Security guard services in Sardinia

In December 1996 the Italian Antitrust Authority completed an investigation into the four main security guard companies operating in the province of Cagliari which had a market share of over 94 percent of the security guard services in the Cagliari province, to ascertain possible violations of section 2 of the Competition Act.

The evidence that emerged showed that none of these companies had exerted any competitive pressure in tendering for any of the contracts awarded in the period 1990-1995. Over time, it was found that there was a total customer stability among the leading security guard companies. Moreover, comparing the invitations to tender for contracts of similar value, the Italian Antitrust Authority found that for those contracts awarded to other companies, each company had submitted higher bids than those usually charged. Lastly, it emerged that two leading companies, when competing against smaller companies, had offered prices below cost to prevent these smaller competitors from being awarded the contracts.

The Italian Antitrust Authority pointed out that this price-setting conduct could not have been the result of an autonomous choice by the single company. Considering the gravity and the duration of these restrictions on competition the Authority imposed fines ranging from 1 percent to 1.5 percent of the companies' turnover totalling 476 million lire. The difference in the percentage of the fine was based on the different ways in which these security guard companies had taken part in the agreement. These fines have been suspended by the Consiglio di Stato.

3.1.3 Glass for food containers

In 1997, the Italian Antitrust Authority conducted an investigation into alleged agreements between the main producers of glass containers for food, resulting from a complaint by several industrial associations in the food industry.

The Authority found that all the producers of glass food containers belonging to the *Assovetro*, the trade association, had laid down, for 1996 contracts, a standard clause obliging purchasers of glass containers to buy also the packaging used to transport them (wooden shelving and plastic packaging materials). The introduction of this clause substantially increased the costs to purchasers.

It also emerged that since 1993 there had been, through the Assovetro association, an intense exchange of information between the four main producers of glass containers, on every aspect of corporate strategies. The exchange of information through regular meetings, and the evidence of an alignment of prices and other contractual clauses applied by the four companies were considered by the Italian Antitrust Authority evidence of an agreement restricting competition. Fines equivalent to 3 percent of their turnover were imposed on the four companies, amounting to 38 billion lire. The parties appealed against the decision. The appeal is still pending, however the TAR suspended the decision as far as the fines are concerned.

3.1.4 Record industry

In October 1997 the Italian Antitrust Authority completed its investigation into a number of Italian subsidiaries of the leading multinational recording companies (known as the "majors"), namely, Warner Music Italia Spa, Polygram Italia Srl, EMI Italiana Spa, BMG Ricordi Spa, Sony Music Entertainment Spa as well as Federazione Industria Musicale Italiana (FIMI). The purpose of the investigation was to ascertain whether the majors had co-ordinated their pricing policies.

The relevant market, which was identified as the production and wholesaling of musical recordings in Italy, is highly concentrated: the majors control 76 percent of the whole market. As far as the conduct of individual companies was concerned, the investigation showed that all the components of the price charged to retailers were roughly the same for every major recording company, even though their costs varied considerably. During the proceeding it emerged that the fact that the prices offered were virtually the same was not due to any automatic consequence of the market structure, but was the result of systematic exchanges of information both through the FIMI, the trade association, and between the companies themselves. Furthermore the investigation showed that in addition to co-ordinating their prices, the majors had also co-operated on other aspects of their commercial policy such as procedures for using alternative distribution channels (newspaper stands or by mail order) and relations with department stores.

The Authority considered that these conducts were the result of a concerted practice aiming at restricting competition. Considering the serious nature of the infringements, the Italian Antitrust Authority decided to impose a fine on BMG, Polygram, Sony and Warner equivalent to 1.5 percent of their turnover and a fine equivalent to 1 percent of the turnover in the case of EMI because, before receiving the statement of objections, the company had undertaken major commitments to put an end to the restrictive conduct. Overall, the fines amounted to 7,694 million lire. The decision adopted by the Italian Antitrust Authority is currently under appeal.

3.1.5 TIM-Omnitel

In January 1999, the Antitrust Authority began an investigation involving Telecom Italia Mobile and Omnitel Pronto Italia, the only two operators in the Italian market for mobile services, to ascertain the existence of agreements to restrict competition on the relevant market. On January 6 1999 these two companies had simultaneously introduced identical charges for calls from the Telecom Italia public fixed telephone network to subscribers to their respective mobile networks. The Authority is investigating whether such behaviour might be intended to substantially restrict or distort competition on the mobile communications services market.

Access to the mobile telephony market in Italy is regulated. It is restricted to a limited number of firms which have been allowed to enter sequentially. Currently, three companies supply this service, but in January TIM and Omnitel were the only providers. These restrictions in entry, by maintaining a market

with only two operators might have induced firms to reach such restrictive agreement. The case, however, is still pending.

3.2 Discussion

3.2.1 Structural conditions

In all cases markets were highly concentrated. The number of firms involved in the alleged cartel was relatively low: four in *Producers of steel pipes*, *Glass for food container* and *Security guards services*, and five in *Record industry*. These firms had a cumulative market share ranging from 76 percent (*Record industry*) to 94 percent (*Security guards services*).

The Italian Antitrust Authority found that barriers to entry were present in almost all cases. Legal barriers characterised the market for security guard as firms were required to obtain a license from a local authority in order to provide their services within the relevant territory. Entry regulation in some cases may set market conditions that render collusive agreements more stable and hence more likely, as existing firms are not threatened by would be entrants. Product differentiation and economies of scale in the activities of distribution and promotion of the product were reckoned as barriers in *Record industry* whereas technological economies of scale were deemed a serious obstacle to entry in the glass container and in the steal pipes markets.

The existence of multimarket contacts was taken into account in *Glass for food container*. Even though the relevant product market was defined by all types of glass containers suitable for food, the Italian Antitrust Authority recognised that there existed several segments, delimited according to the productive activity of the purchasers, where in principle different competitive conditions might have emerged as the transactions concluded in each segment were largely independent of the conditions prevailing in the others. Two of the four parties of the cartel had formed a joint venture to operate in one of those segments. The Italian Antitrust Authority argued that this arrangement was likely to affect the competitive conduct of the two firms also in the other segments of the relevant market.

Finally, other structural conditions mentioned in *Security guard services* are the rigidity of demand, the frequency and regularity of public tenders, the homogeneity of products.

3.2.2 Circumstantial and behavioural evidence

Price parallelism constituted strong evidence of co-operation in two cases: *Record industry* and *Glass*. In both cases the investigation considered all the aspects of the firms' pricing policy: listed prices, rebates, extra-charges for special services and conditions of payment. The Italian Antitrust Authority ascertained that the net prices charged by the firms forming the cartel were approximately at the same level and had been increased over time roughly at the same dates. However, in the glass container market firms listed different prices and the final homogeneity, which followed an intense price war, was the result of different rebates policies.

In three cases (*Steel pipes*, *Glass containers* and *Security guards*) according to the Italian Antitrust Authority stability of market shares over time provided a precise clue of firms' intention to substitute "practical co-operation between them for the risks of competition". In *Security guards* the Italian Antitrust Authority examined also the identity of the purchasers of security guard services and found out that the firms involved in the case had served the same customers along the whole relevant period of time. In *Steel pipes* the circumstantial evidence was reinforced by some documents that made references to a quota scheme implemented by the cartel.

The most striking and convincing behavioural evidence regards the conduct firms hold in tender (competitive) procedures. In *Security guard* customers organised auctions to choose their service provider. Firms had to submit sealed bids. The provision of the service would have been assigned to the firm asking for the lowest price. In *Security guard* the four firms forming the cartel asked different prices to different auctions in a manner that was unrelated to the cost of the service provided or to any other relevant economic factor, but that carefully avoided any switching of customers among them. The Italian Antitrust Authority examined 106 auctions from 1990 trough 1995 and concluded that the bidding strategies of the four firms under investigation could be explained only by the intention of avoiding a competitive confrontation.

Finally, the behaviour of firms which supposedly did not belong to the cartel provided further evidence. The comparison between insiders and outsiders conducts showed that competitive strategies were feasible and profitable. In *Security guard services* outsiders offered significant rebates over the standard price and were able to win some auctions up to the limit given by their productive capacity. The Italian Antitrust Authority also found that in those (smaller) auctions in which outsiders participated, insiders adopted a different pricing policy trying to fight the new entrants and drive them out of the market. This lead to the formation of two distinct submarkets. The first submarket encompassed all those auctions in which outsiders could not participate given their limited capacity and experienced a higher average price with a growing trend. The second submarket comprised smaller auctions in which outsiders could and, in some cases, did participate. In this submarket the average price was much lower and decreasing over time. Similar conditions were found in *Glass* and *Record industry*.

3.2.3 Documentary evidence

In almost all cases examined by the Italian Antitrust Authority circumstantial evidence was supplemented by some documentary evidence. Documents proved that representatives of the firms had met several times on a regular basis and that during those meetings they discussed various aspects of their commercial strategies. The Italian Antitrust Authority also found documents that proved regular and frequent exchanges of detailed information through the trade association and/or directly among competitors. In *Record industry* the information exchanged was particularly detailed. It concerned the sales' volume and value of each company disaggregated along several dimensions: type of music; product (tape, vinyl, CD); price range (single, budget, medium, top). In *Glass for food container* firms exchanged information on their sales for each market segment (type of food). In both cases information was exchanged on a monthly basis. In *Steel pipes* two documents outlined a quota scheme and one firm admitted that the documents defined the maximum output each firm was allowed to produce.

In three of the four cases examined (*Security guard services* being the only exception) the exchange of information was considered by the Italian Antitrust Authority part of a tacitly collusive scheme and in *Glass for food container* also as an antitrust violation in itself.

It must be noted that in all cases in which facilitating practices were alleged the trade association played a central role either as the collector and distributor of information or as the organiser of the meetings in which firms exchanged information directly.

The only case in which documentary evidence was totally absent was *Security guard services*. However, the facts were so conclusive that the Italian Antitrust Authority decided that they formed a firm, precise and consistent body of evidence of concertation. It must be noted that the way transactions were carried out in this market allowed firms to obtain all the information required to co-ordinate their strategies without a direct exchange of information. At the mean time, however, the Italian Antitrust Authority was able to observe the pricing strategy that firms adopted in all circumstances, i.e. both when they concluded the transactions and when they did not as their offer was beaten by another. Data stemming from 106

auctions over a period of six years allowed to build such a clear cut representation of the facts that documentary evidence was no longer needed to prove collusion.

3.2.4 Remedies

Tacit collusion poses a final problem: remedies. Formal agreements can be declared void, firms will receive an injunction not to sign similar agreements in the future and will be given a fine. In case of tacit collusion, however, the competition authority may have hard time in explicitly defining what is the prohibited conduct and in following up its initial decision. For instance, even if "co-ordination of pricing policies" (as opposed to price-fixing agreements) is clearly an anti-competitive practice (and is illegal, as such) it is not easy to envisage a means to curb firms' conduct so that they cannot co-ordinate their pricing policies anymore.

The Italian Antitrust Authority adopted different remedies according to the infringement. In all cases in which a regular exchange of information through the trade association had occurred the Italian Antitrust Authority issued a cease and desist order, prohibiting the collection and dissemination of desagregate information among members.

The only remedy available to cope with concerted practices is the infliction of fines that should deter firms from continuing their wrongdoing. However in many instances it is not clear what they should not do if nothing in particular is detected.

4. Conclusions

The application of the prohibition of horizontal anticompetitive agreements to attack co-ordinated strategies likely to distort competition and harm consumers proved to be extremely difficult in the Italian experience. However a more solid and reliable approach is slowly emerging. First of all close attention must be paid to the structural conditions of the market. Number of firms, degree of concentration, entry barriers, product homogeneity, multimarket contacts are all important factors to evaluate the likelihood of collusive behaviours.

Circumstantial and behavioural evidence in principle may suffice to prove tacit collusion. Parallelism of prices, stability of market shares and especially bidding strategies in public tenders without any economic rationale other than collusion are likely to be accepted as proof that firms have agreed not to compete.

However, in order to form a firm, precise and consistent body of evidence of concertation some documentary evidence is often needed. Usually these documents testify the attempt of firms to improve the transparency of the market exchanging information about their commercial strategies. This exchange of information is both part of the body of evidence useful to prove collusion and an antitrust infringement in itself as it constitutes a facilitating practice conducive to the co-ordination of conducts among rivals.

Finally, according to the experience of the Italian Antitrust Authority, available remedies seem to provide a limited means to curb collusive behaviour.

JAPAN

The Fair Trade Commission (FTC) has taken many measures for the prevention of collusive price fixing, mergers with anticompetitive effects and other anticompetitive acts. We will cite several examples.

1. Application of provisions prohibiting horizontal agreements to address collusive price fixing and other acts injurious to consumers

1.1 Treatment of evidence of anticompetitive agreements between firms

1.1.1 Examples of rulings and administrative decisions concerning tacit agreements

Toshiba Chemical Case - Tokyo High Court (September 25, 1995)

The FTC issued recommendations on June 6, 1989 to Toshiba Chemical Corporation (hereinafter referred to as "Toshiba Chemical") and seven other companies which had established forums for the frequent exchange of opinions on how to halt the decline in selling prices and increase prices for copper-plated laminate for printed circuit boards. Following these discussions, the above-mentioned firms increased the delivery prices for users of copper-plated phenolic paper laminate, and this decision had been implemented.

The seven other companies accepted the recommendations. However, Toshiba Chemical refused, and the FTC initiated hearing procedures on August 8, 1989. A hearing decision was issued on September 16, 1992, but Toshiba Chemical filed suit on October 16, 1992, demanding that the decision be quashed. In response, the Tokyo High Court quashed the FTC's decision and remanded the matter to the FTC on February 25, 1994. The FTC once again issued a decision to eliminate the violations on May 29, 1994, and Toshiba Chemical again filed suit demanding that the second decision be quashed. The Tokyo High Court rendered a decision on this matter on September 25, 1995 rejecting Toshiba Chemical's demands.

Toshiba Chemical asserted that in this trial there was a lack of substantial evidence to support the fact that it and the seven other companies had made a decision to raise the delivery prices to domestic users of the products.

In response to the assertion of item 3, the Tokyo High Court ruled that:

> …'communication of intent' is the mutual recognition or anticipation of a price increase by multiple entrepreneurs for the same products or services, and the intention to act upon this in accordance with others. Although mere recognition and acceptance of one party's unilateral price increase by another is insufficient evidence, it is not necessary to demonstrate that there was an explicit agreement between entrepreneurs. Mutual recognition of other entrepreneurs' price increases and silent acceptance is interpreted as sufficient evidence (this is said to be 'communication of intent' through tacit means). Unless there are special circumstances demonstrating that a certain entrepreneur made independent decisions that it can withstand price competition in the trading market without regard for the behaviour of other entrepreneurs, we

should presume that these entrepreneurs have mutual intentions of adopting collusive behaviour, and that there was 'communication of intent'.

Toshiba Chemical's suit was therefore rejected.

1.2 Application of provisions prohibiting anticompetitive horizontal agreements in order to prohibit facilitating practices (actions and practices that tend to lead to anticompetitive agreements and tacit understandings)

Ethyl Acetate Cartel Case

Six companies supplying almost all of the ethyl acetate in Japan established the Ethyl Acetate Association to co-ordinate sales of ethyl acetate. The following decisions were made by this association.

Domestic sales percentages for companies were predetermined for each fiscal year, and companies whose actual sales percentages had exceeded their allotted percentage were obligated to purchase, on a quarterly basis, corresponding volumes from companies whose actual sales percentages were lower than their allotted percentage.

The six companies predetermined the delivery volumes of joint suppliers of specific users, and companies whose actual delivery percentages had exceeded their allotted percentages were obligated to purchase, on a quarterly basis, corresponding volumes from companies whose actual delivery percentages were lower than their allotted percentage.

The six companies discovered other companies' shipment conditions by obtaining their supply of ethyl acetate through a designated trading company, and attempted to prevent the supply of ethyl acetate from sources other than the designated trading company to ensure the effectiveness of limitations on sales volumes.

The six companies decided to raise the delivery price per kilogram of ethyl acetate by more than three yen above the current price, and selling prices were essentially raised in accordance with this decision.

The FTC issued an order to the six companies on September 27, 1973 to annul the above decisions and disband the Ethyl Acetate Association, because the actions of items 5, 6 and 7 violated the provisions of Section 3 of the Antimonopoly Act (Recommendation decision issued on October 18, 1973).

Note: The six companies had been issued recommendations from the FTC on December 27, 1971 concerning actions that were similar in terms of content and facts. (Recommendation decision issued on January 8, 1972)

2. Merger examinations to reduce the possibility of anticompetitive collusive effects

Japan's Antimonopoly Act prohibits private monopolisation and unreasonable restraint of trade (Section 3) as actions which "substantially restrain competition." However, mergers and acquisitions are prohibited by the above clause "should competition be substantially restrained." A merger or acquisition will be prohibited when it is likely to "substantially restrain competition."

As a result, in terms of regulating market concentration, unlike private monopolisation and unreasonable restraint of trade, it is not necessary for competition to be actually substantially restrained or

for anticompetitive effects to arise. The merger or acquisition will be prohibited merely if it is probable that these effects may occur.

In terms of the anticompetitive effect of "substantially restraining competition," the interpretation that "to restrain competition substantially means to bring about a state in which competition itself has significantly decreased and a situation has been created in which a specific firm or a group of firms can control the market by determining price, quality, volume and various other conditions with some latitude at its or their own volition" was indicated in a past precedent (decision of the Tokyo High Court concerning Toho Company, Limited and another individual on December 7, 1953). The recently announced guidelines on mergers and acquisitions (M&A) on December 21, 1998 are based on this precedent, and "may be to restrain competition substantially" means that "substantial restraint of competition" is "probable." Specifically, "if the market structure is altered in a non competitive manner by the M&A, and the company is able to manipulate price, quality, volume, and other conditions unilaterally or by acting co-operatively with other companies", then the effect of the merger or acquisition may be to substantially restrain competition.

In this way, the FTC's legal action concerning market concentration regulations is based on the concept of prohibiting mergers or acquisitions not only by preventing a company from being able to form or consolidate a market-controlling position, but also when an anticompetitive effect arises from the company acting in co-operation with other companies.

The FTC's guidelines on mergers and acquisitions clarify how decisions about substantial restraint of competition are made in a particular field of trade. Market share, ranking, and the other main determining factors are specifically cited, and the consideration of these factors is clarified as necessary through the use of past precedents. The probabilities of both unilateral effects and co-ordinated effects are analysed in examinations of market concentration. Therefore, the view indicated in the guidelines on mergers and acquisitions is applied to analysis of both of these effects.

The factors indicated in the guidelines on mergers and acquisitions which can be expected to be employed in the analysis of co-ordinated effects are as follows. Items (1), (2), and (3) are classified as so-called structural factors, while items (4) and (5) are classified as so-called behavioural factors. (However, item (3) can also be a behavioural factor, and (4) can also be a structural factor.)

2.1 Number of Competitors and Degree of Competition

It is a commonly accepted principle of economic theory that collusive behaviour, such as parallel price increases, etc., tends to occur in markets with few competitors or in highly concentrated markets.

It is clearly indicated in the guidelines on mergers and acquisitions (under the item on "number of competitors and degree of competition") that there will be consideration of the fact that collusive behaviour tends to occur among competitors when a market is altered to become oligopolistic.

2.2 Entry barriers

New entry into markets has the effect of preventing profits gained through the collusive behaviour adopted by existing entrepreneurs. Additionally, not only actual entry, but potential entry pressure also hampers collusive behaviour among existing entrepreneurs. Stated in different terms, co-ordinated effects tend to arise in markets which are difficult to enter.

In terms of entry barriers, the guidelines on mergers and acquisitions considers not only legal restrictions, but also de facto entry barriers (minimum funding scale necessary for entry, conditions of

location, technological resources, procurement of raw materials, sales conditions, product differentiation conditions and other factors).

2.3 Competitive pressure from neighbouring markets

Collusive behaviour among entrepreneurs is restrained when there is evidence of competitive pressure from neighbouring markets. For example, if buyers in the next trading level have a superior trading position with respect to suppliers, collusive behaviour among entrepreneurs does not occur easily, even if market concentration is high. However, this trading position can be substantially altered by a merger or acquisition. It is therefore dangerous to base decisions only on past conditions.

2.4 Existence of strong competitors

The fact that a merged entity will face strong competitors may or may not prevent anticompetitive effects. On the one hand, where such competitors together with the merged entity together account for most of the market, there is a possibility of collusion among them. On the other hand, a group of strong outside competitors could mean that the merger fails to create or strengthen a dominant position. It is therefore important to determine whether the strong outside competitors can be expected to adopt collusive, submissive or aggressive competitive behaviour toward the merged entity.

As indicated in the guidelines on mergers and acquisitions, past competitive conditions, market shares, and price fluctuations are also taken into consideration. For example, the fact that cartels or parallel price increases without an actual cartel, have occurred frequently in the past, support the assumption that co-ordinated effects would probably occur.

Additionally, the behaviour of strong competitors is often influenced by changes in the market structure as a result of a merger or acquisition. Therefore, we should avoid hasty conclusions that competitive behaviour is likely to continue after a merger or acquisition, simply because aggressive competitive behaviour occurred in the past.

2.5 Existing competitive conditions between the companies

There is a possibility that the existing competitive structure of a market will be radically altered by a merger or acquisition. For example, active competition between certain entrepreneurs and the non-collusive behaviour of maverick firms negate or make it difficult for other entrepreneurs to engage in collusive behaviour in the market. However, there are cases in which a merger or acquisition can be expected to eliminate active competition between certain entrepreneurs and non-collusive behaviour between other entrepreneurs (for example, when two entrepreneurs engaging in active competition decide to merge, and when entrepreneurs engaging in non-collusive behaviour are acquired by other entrepreneurs). It is believed that this type of merger often tends to facilitate collusive behaviour in the market.

2.6 Conclusion

It is not appropriate to rank the importance of these specific, deciding factors. This is because the factors most closely related to co-ordinated effects vary for individual markets. For example, despite a highly concentrated market, if there is pressure from a strong new entry, this pressure will lessen or offset the probability of co-ordinated effects. If there are legal entry regulations, the probability of co-ordinated effects will increase, even in markets with a low degree of concentration. Additionally, even if these

individual factors are in themselves insufficient to produce the probability of co-ordinated effects, there are cases in which they have a cumulative impact and the likelihood of co-ordinated effects can be seen. Therefore, it is necessary to consider all factors comprehensively. Additionally, in the guidelines on mergers and acquisitions, the analysis of anticompetitive effects includes comprehensive consideration of the specific, deciding factors for each individual merger proposal.

When a merger or acquisition is prohibited by market concentration regulations, how the way in which this is legally determined will naturally differ according to competition law in each nation. However, it is not considered whether "formation or consolidation of a market-controlling position" or "substantial restraint of competition" have decisive significance in market concentration regulations as legal prohibiting conditions. Rather, it is important to identify these prohibiting conditions through actual analysis in order to prevent both unilateral and co-ordinated effects and promote competition through law enforcement.

Additionally, while it is often useful to consider unilateral and co-ordinated effects separately in the analysis of anticompetitive effects, the effects arising from actual mergers or acquisitions are not limited to either unilateral or co-ordinated effects. Therefore, we must be careful to assess whether these effects combine to create a synergistic effect.

For example, there are cases in which other competitors' competitive desire is lost and the incentive for collusive behaviour increases if a certain firm obtains an overwhelming market share as a result of a merger or acquisition. Additionally, there are cases in which the leading firm achieves price dominance because the entrepreneurs below the two leading firms in the market engage in collusive behaviour. In such cases, it would be appropriate to analyse the problem whilst recognising that the combined synergistic impact of both unilateral and co-ordinated effects may produce intolerable anticompetitive consequences. This would be more effective than analysing the probability of unilateral and co-ordinated effects separately.

Appendix

Treatment of anticompetitive oligopolistic behaviour

* ***Provisions concerning parallel price increases and their implementation.***

The mutual recognition of pricing strategies and business circumstances is easy to accomplish in highly oligopolistic industries without mutual communication of intent, and finding proof is difficult even if there is communication of intent. Price leadership and deliberate, parallel actions have the same impact on users as cartels prohibited by the Antimonopoly Act, and from their outward appearance, it is difficult to distinguish these actions from cartels. According to this view, the provision of a collection of reports concerning parallel price increases was established through an amendment of the Act in 1977.

Specifically, Section 18-2 of the Antimonopoly Act stipulates the following provision:

In a particular field of business where the total annual price of products or services exceeds sixty billion yen, and where the combined market share of the three leading entrepreneurs exceeds seven tenths, if two or more entrepreneurs (including the largest one) raise prices by an identical or similar amount or percentage within a period of three months, the FTC may ask these major entrepreneurs for a report indicating the reasons for such price increases in their products or services. The FTC must provide an outline of these reports in its annual report submitted to the Diet (Section 44-1 of the Act)

Additionally, when necessary, explanations are requested in the form of reference materials; if, or example, the price increase is due to an increase in raw material costs or labour costs. Accordingly, further information concerning the condition of the alleged price increases may be requested.

Reports collected in the last five years under that provision are indicated in the attachment.

* ***What effects and results have been identified from the provision concerning parallel price increases?***

It is expected that the provision concerning parallel price increases will enhance the transparency of price formation in oligopolistic industries, for the sake of the nation's citizens, encourage caution in the pricing decisions of entrepreneurs, and contribute towards the promotion of fair and free competition.

Report Collection Conditions for Parallel Price Increases (Last Six Years)

Annual Report Fiscal Year	Product(Date of Report Request)	Entrepreneurs Targeted for Report Collection(Date of Price Increase)
FY 1993Three products	Dry batteries (September 13, 1993)	Matsushita Battery (March 1, 1993), Hitachi Maxell (April 1, 1993)
	General, daily national newspapers (March 11, 1994)	Yomiuri Shimbun (January 1, 1994), Asahi Shimbun (December 1, 1993), Mainichi Newspapers (December 1, 1993), Nihon Keizai Shimbun (February 1, 1994)
	Beer (June 29, 1994)	Kirin Brewery (May 1, 1994), Asahi Breweries (May 1, 1994), Sapporo Breweries (May 1, 1994), Suntory (May 1, 1994),
FY 1994Two products	Polished flat glass (March 16, 1995)	Asahi Glass (June 10, 1994), Nippon Sheet Glass (September 1, 1994), Central Glass (August 1, 1994)
	Instant coffee (July 4, 1995)	Nestle Japan (January 1, 1995), Ajinomoto General Foods (January 1, 1995)
FY 1995	None	
FY 1996	None	
FY 1997Two products	Instant coffee (October 14, 1997)	Nestle Japan (June 2, 1997), Ajinomoto General Foods (July 1, 1997)
	Polished flat glass (November 25, 1997)	Asahi Glass (April 1, 1997), Nippon Sheet Glass (May 1, 1997), Central Glass (May 1, 1997)
FY 1998	None	

KOREA

A case of using prohibitions on horizontal agreements to attack co-ordinated pricing or other behaviour harming consumers

1. Facts

Companies A, B and C manufactured and sold paper products with revenues of 887.7 billion Won, 251.9 billion Won, and 59.9 billion Won respectively. The total market share of the three companies was: 89.5 percent (newsprint); and 81.0 percent (book stock). Company A accounted for 60.4 percent of both items' market as of the end of 1994.

The three companies raised their prices of newsprint by 9 percent on January 1, 1995 due to rising international raw material costs and a surge in the domestic demand(due to an increased number of newspaper pages, etc.). On April 1, 1995, they carried out a second price hike of 16 percent, and a third hike of 8 percent on September 1, 1995. For book stock, they raised prices by 9 percent on April 1, 1995, 9.5 percent on September 1, 1995, and lowered the prices by 3 percent on April 1, 1996.

Although a large fall in international raw material prices after October 1995 would have justified a sales price decrease, the companies were still maintaining the prices since the third hike for newsprint and the first drop in prices for book stock.

2. Ruling

The Korea Fair Trade Commission (KFTC) deemed the three price hikes by the three companies an improper concerted action (specifically, a improper concerted action on prices prohibited under Article 19 paragraph (1)) and ordered an end to an agreement that fixes the price of newsprint and book stock that would restrain competition in the relevant market. Three companies were also fined 17.9 billion Won (about US $20 million) of surcharges. In addition, the KFTC ordered that the three companies place a public announcement of their being disciplined by the competition authority on the weekday instalment of a major newspaper.

The KFTC tested two elements; *i)* the existence of an agreement and *ii)* restraint on competition in the market, in order to determine whether the actions of the companies constituted an improper concerted action within the meaning of Article 19 of the Monopoly Regulation and Fair Trade Act (MRFTA).

In relation to the first element, The MRFTA gives a strong tool to the competition authority by allowing it to presume the existence of an agreement. Article 19 (5) of the MRFTA provides "when two or more enterprises are committing any of the acts listed in Paragraph (1) which substantially restrict competition in a particular field of trade, the parties shall be presumed to have committed an improper concerted act despite the absence of an explicit agreement to engage in such an act." This presumption is of course rebuttable but it shifts the burden of proof to the defendants. In presuming the existence of an agreement, the KFTC considers the following plus factors:

- proofs of direct/indirect communications or exchange of information;
- the alleged agreement is contrary to the interests of individual parties unless carried out altogether;
- the coincidence of the conduct is not justified in terms of business purposes;
- the industrial structure or market situation precludes the possibility of accidental coincidence.

In this case, the KFTC presumed the three companies engaged in improper concerted activities under a tacit agreement considering the fact that there were some plus factors: *i)* the price increases coincided three times, not once or twice, *ii)* despite their differences in cost structures and management, B and C used the same increased rates, and *iii)* there were networks of communication not only among the three companies through abusiness association, but also between the producers and the buyers' representative, the Korea Newspaper Association (KNA).

Company A argued that since the KNA had strong buying power, Company A, as a representative of the industry, had no choice but to negotiate the range of its price increase and its implementation schedule with the KNA and it was the KNA who insisted that the other companies, B and C, should follow the negotiated range of price increase and the proposed implementation schedule.

The KFTC refuted the argument of Company A as follows:

First, there is no exemption allowed for those who do not have bargaining power in the market.

Second, plus factors such as meetings and communications and the coincidence of price increases prove that the three companies were in close relations to co-ordinate the timing of price increases.

Lastly, even if KNA exercised strong bargaining power, the newsprint market is hardly a buyers' market considering following facts; *i)* the three suppliers have almost 90 percent of market share. *ii)* the three companies did actually succeed in increasing the price three times. iii) The newspaper companies had inventory of newsprint only for one day.

The second element of the violation, the restraint on competition, was easily proved. The three companies alleged concerted action constituted restraint of price competition in the local newsprint and book stock markets, since they, as market-dominating enterprises with 89.5 percent of the local newsprint and 81 percent of the book stock markets, did not compete on prices but instead fixed the price of paper products at an agreed level.

NEW ZEALAND

1. Introduction

New Zealand's competition law - the Commerce Act 1986, has no mechanism to reduce the likelihood of oligopolistic coordination in the New Zealand economy. Its merger control focuses on preventing the acquisition, or strengthening, of single firm dominance in a market. Similarly, its misuse of dominance restriction is limited to use of dominance by a single firm. Prohibitions on anti-competitive agreements between competitors only relate to explicit agreements. There are no restrictions on anti-competitive agreements between competitors arising from tacit understandings.

In December 1998, the New Zealand Government agreed to review the thresholds for these three key prohibitions, primarily to enable the Act to reduce the likelihood of anti-competitive outcomes achieved through oligopolistic co-ordination. At this stage it is likely that the Government will sponsor legislation that will opt for reliance on merger control to reduce the likelihood of tacit collusion in the economy. This change would also assist in reducing the likelihood of explicit collusion. The Government is expected to make decisions on the proposals in June 1999, following public consultation.

New Zealand's contribution to this roundtable discussion focuses on the limitations of its Act. It discusses why reliance on merger control is likely to be the regulatory solution that is adopted in New Zealand to reduce the likelihood of oligopolistic coordination in the economy.

2. Anti-competitive oligopolistic behaviour

In some highly oligopolistic industries firms can co-ordinate their pricing and output decisions by doing little more than observing and anticipating the moves of their rivals. This ability arises because the decisions of oligopolistic firms are interdependent. Each firm recognises that the sale of its product depends on the prices that its rivals charge, and that its rivals will react to any change in price, or output, that it makes. Given this interdependence, firms recognise that their profits will be higher when co-ordinated policies are pursued than when each firm looks after its narrow self-interest.

This is because even though an individual firm could increase its profits in the short term by reducing its price, this price reduction may cause rivals to respond by similarly reducing their prices. This results in lower profits for all firms. Thus a preferable strategy might be for all firms to increase price where the drop in revenue from the lost sales, is less than the total rise in revenue achieved through the price increase.

In this way, even in the absence of any formal collusion among firms, tight oligopolistic industries can be expected to exhibit a tendency toward the maximisation of collective profits. The effect of such oligopolistic coordination is parallel behaviour, such as parallel price movements, that approaches the results associated with explicit agreement to set prices, output levels, or other conditions of trade. It has also been established that such behaviour can approach the pricing and output outcomes associated with pure monopoly[1], and thus impose significant efficiency losses throughout the economy.

An example of the significance of the economic loss that can be caused through oligopolistic co-ordination can be found from two studies of the New Zealand retail petrol market. The International Energy Agency (IEA), in its May 1997, concluded that there were: '*…grounds for suspecting oligopolistic pricing behaviour by the four oil companies that dominate the industry*'[2].

An earlier study by the New Zealand Institute of Economic Research (NZIER)[3] compared New Zealand's retail petrol prices and the landed price of imported petrol between 1990 and mid-1996. This study noted that there was a significant difference between the cost of landed imported product plus the minimum necessary distribution and retailing costs, and the price actually charged at the pump, but that this gap had actually increased by approximately 1.1 cents per litre per year since 1992. According to the NZIER, for every 1-cent per litre increase in the price of petrol, the oil companies' combined revenue increased by approximately $27 million per annum.

Although the industry was deregulated in 1988, it is interesting to note that only with the entry of an independent retailer (Challenge) into this market, in April 1998, and the announced intentions of other independents to enter the market, did the retail price of petrol decrease significantly. However, this decrease only occurred in the areas of where Challenge opened retail outlets. Subsequent entry in 1999 by Gull Petroleum in other regions has lead to price falls in those regions.

The fact that conscious parallel behaviour went unchallenged for a ten year period before a government report exposed it and encouraged new entry, illustrates the fact that information is not costless and that its cost can be a significant barrier to entry.

3. New Zealand's competition law can not respond to oligopolistic co-ordination

Currently, New Zealand's competition law - the Commerce Act 1986, has no mechanism to reduce tacit collusion in the New Zealand economy. Its merger control focuses on preventing the acquisition, or strengthening, of single firm dominance in a market. Similarly, its misuse of a dominant position restriction is limited to single firm dominance. New Zealand's prohibitions on anti-competitive agreements between competitors only relate to explicit agreements. There are no restrictions on anti-competitive agreements arising from tacit understandings.

3.1 Merger control under the Commerce Act

The Act's structural prohibition, section 47, prohibits business acquisitions that are likely to result in the acquisition, or strengthening, of a dominant position in a market. This prohibition only relates to the creation of single firm dominance via merger, where there are no offsetting efficiency gains. This focus on single-firm dominance ignores any potential harm that may result from oligopolistic co-ordination in a market. Further information on the current scope of New Zealand's merger control is given in the appendix to this paper.

An example of the limited ability of the merger provisions to take into account the potential harm that can result from joint dominance, is the Commerce Commission's[4] decision of 12 February 1999 that gave TransAlta Corporation of Canada (an energy company involved in the generation, wholesaling and retailing of electricity) a clearance for its proposed acquisition of 40 percent of Contact Energy Limited (a state owned energy company involved in the generation, wholesaling and retailing of electricity).

Part of the material considered by the Commission was a study, commissioned by the Ministry of Commerce, that modelled market power issues relating to the sale of Contact Energy Limited in the

electricity wholesale and retail markets. This study concluded that in the event of this acquisition output would shrink and prices would rise by four to five percent for at least a five-year period.

Although the study could not, of course, be tested in practice, the Commission in its decision noted that: *'the incentives for collusive behaviour may be strengthened by the proposed acquisition'*. However, the Commission further stated:

> "…this exhibition of enhanced market power by a group of oligopolists would not be evidence of a dominant position having been acquired or strengthened…dominance under the Act refers to single firm dominance, and a dominant position in a market refers to a firm being able to exercise a "high degree of market control"…
>
> Clearly, a merger between Contact and TransAlta would be very likely to trigger antitrust concern in the United States. However, the threshold for anti-merger policy in that country under the Clayton Act is a "substantially lessening of competition", which is a lower threshold than the dominance threshold under the Commerce Act…The Commission is bound by the Commerce Act and by court precedents on dominance set under that Act."

The 40 percent cornerstone shareholding of Contact Energy was subsequently acquired by a different company who out-bid TransAlta in the public tender.

3.2 The Act's behavioural provisions

The Act's two key behavioural provisions also ignore the potential for oligopolistic co-ordination. Section 36 regulates the use of a dominant position in a market. Section 3(8) of the Act defines a dominant position in a market as '*one in which a person as a supplier or an acquirer of goods or services alone, or together with any interconnected body corporate, is in a position to exercise a dominant influence over the production, acquisition, supply, or price of goods or services in a market'*. The limitations of this definition in respect of joint dominance together with judicial interpretation of 'dominance', since the Act came into effect 12 years ago, has left no scope for applying section 36 to the aggregated power of two or more firms in a market.

Section 27 of the Commerce Act prohibits contracts, arrangements, or understandings, between competitors, that have the effect, or likely effect, of substantially lessening competition in a market. This prohibition relates to instances of explicit collusion only. Case law to date suggests that for any liability to arise, communication between parties, or at least a conscious mutual commitment, is a necessary condition. This test is derived from the leading United Kingdom case – *British Basic Slag Limited* where Cross J said:

> "All that is required to constitute an arrangement not enforceable in law is that the parties to it shall have communicated with each other in some way, and that as a result of the communication each has intentionally aroused in the other an expectation that he will act in a certain way."[5]

The need for communication of the terms of the arrangement between the parties has been held to apply in New Zealand as well as in Australia.[6] However, in *Auckland Regional Authority v Mutual Rental Cars (Auckland Airport) Ltd* (1988), Barker J said:

> "An arrangement or understanding comes into existence as a result of some communication between the parties; the communication can however occur by written or spoken word the one to the other or by one observing and interpreting the other's behaviour.[7]"

Although this reference to communication by 'observing and interpreting' suggests that section 27 could be used to remedy tacit collusion, it has never been applied by the New Zealand courts to such conduct.[8] The few New Zealand cases[9] that have considered the meaning of an 'arrangement or understanding' in an oligopoly context, have concluded that collusion is not an inevitable result of an oligopolistic market structure, and should not be inferred merely from parallel conduct which produces apparently anti-competitive outcomes.[10] In other words outcomes which in economic terms can only be explained by collusion, would probably be held to be insufficient to satisfy the evidential requirements of an 'arrangement or understanding'.[11]

4. Proposals to enable the Commerce Act to respond to anti-competitive co-ordination

In December 1998, the New Zealand Government agreed to review the thresholds for the Act's three key prohibitions[12], primarily to enable the Act to reduce the likelihood of anti-competitive outcomes achieved through oligopolistic co-ordination. In early April 1999, the Ministry of Commerce released a discussion document, for public consultation, that proposed that merger control be the tool relied on to reduce the likelihood of both explicit and tacit collusion in the economy. The Government is expected to make decisions on the proposals in late June 1999.

In developing options to respond to the potential for oligopolistic co-ordination, it was recognized that there are choices between whether structural or behavioural prohibitions, or some combination of the two, are used. The remainder of this section discusses why New Zealand is likely to opt for using its structural prohibition to reduce the likelihood of oligopolistic co-ordination in the New Zealand economy.

4.1 Tacit collusion depends on the presence of certain market characteristics

Economic studies of oligopolistic co-ordination over time, suggest that anti-competitive co-ordinated behaviour is not inevitable in oligopolistic markets, rather it depends on the nature of the product and its associated market, or industry, structure. As the root of the problem of tacit collusion appears to be essentially structural, this suggests that merger control, cognisant of the market characteristics that are likely to be conducive to collusion, can play an effective role in lowering the potential for tacit collusion in the economy. Merger control can also respond to explicit collusion in a preventative way, providing a useful supplement to behavioural prohibitions.

Generally, it has been found that oligopolistic coordination will be <u>less</u> likely to be successful the greater the degree that:

- the product supplied is heterogeneous, complex or changing;
- the industry is dependent on large and infrequent orders;
- there are depressed business conditions[13];
- firms can increase sales by winning several contracts with large buyers, or by signing long-term contracts with buyers;
- captive production, or non price competition (e.g. advertising and servicing), allows firms to increase sales secretly[14];
- entry entails low sunk costs;

- an anti-competitive price rise would be defeated by new competition, or deterred by the prospect of new competition[15].

At the enforcement level reducing the potential for tacit collusion requires a targetting of merger scrutiny on those mergers where factors such as few players, high sunk costs and product homogeneity indicate that market conditions may facilitate coordination rather than competition.

4.2 Dilemmas of using behavioural remedies to respond to tacit collusion

Allowing behavioural prohibitions to remedy instances of tacit collusion presents a number of dilemmas that suggest that conscious parallel behaviour should not be treated as illegal of itself. At most it should be treated as circumstantial evidence of anti-competitive behaviour.

The first dilemma arises from the observation that in oligopolistic industries the decisions of firms are interdependent. In deciding what action to take any seller in an oligopolistic market "*must consider not merely what his competitor is doing now, but also what he will be forced to do in the light of the change which he himself is contemplating*"[16]. The fact that rational pricing and output decisions require an oligopolist to consider its rivals' reactions, and that such analysis may lead to parallel pricing, creates an unreasonable and possibly unjust basis for deeming parallel behaviour to be illegal of itself. If it were compliance would require an oligopolist to ignore the economic realities of the market within which it operates.

Second, even if tacit collusion were illegal, to prove collusion the courts would have to rely on circumstantial, or indirect, evidence that would at best be ambiguous. For instance parallel prices may reflect a set of identical business responses, by a group of similarly situated competitors, to the same economic conditions, as much as they reflect tacit collusion. Indeed, it would be difficult to wade through all the relevant economic variables, without perfect knowledge of how they interacted to determine price and output, to categorically say whether price uniformity has resulted from fierce competition, or from tacit collusion.

As knowledge is not perfect, it is likely that the use of behavioural remedies to correct instances of tacit collusion may not necessarily result in a net benefit for the economy. Although the reduction in tacit collusion will bring economic benefit, this benefit needs to be weighed against the costs that may be associated with the prohibition, such as:

- the potential for judicial error;

- increasing the level of legal and thus business uncertainty for firms in oligopolistic markets; and

- deterring efficient outcomes, e.g. deterring price matching where a firm is forced to lower the price charged for its good because of the actions of its rival(s) simply to protect its market share.

4.3 Reliance on merger control has its limitations

Reliance on merger control to reduce the likelihood of tacit collusion has its limitations. Merger control can not prevent tacit collusion occurring in oligopolistic markets already in existence. Nor can it respond to its potential in oligopolistic markets that arose from technological advantage[17] and other key sources of firm expansion and exit.

Nevertheless, decisions about the extent of the regulatory solution employed to respond to oligopolistic co-ordination need to be made in light of the costs and benefits that will arise. New Zealand lacks the experience of other OECD countries in using behavioural prohibitions to reduce the incidence and likelihood of tacit collusion. However in its assessment, although it appears that the use of merger control will result in a net benefit to the New Zealand economy, it is not at all certain that the use of behavioural remedies will yield a positive outcome. In particular, the costs of judicial error, increased uncertainty, and deterred activity, may be so significant that they overshadow the economic benefits derived from reducing tacit collusion across the economy.

5. Employing merger review to reduce the probability of anti-competitive coordination

As stated above, the Ministry of Commerce has released a public discussion document proposing that merger control be relied on to reduce the likelihood of both explicit and tacit collusion occurring in the New Zealand economy. Specifically this proposal is to broaden the thresholds for mergers and acquisitions from 'dominance' to 'substantially lessening competition'. This change should allow for a fuller scrutiny of mergers, including the potential for mergers to be scrutinised in terms of whether they facilitate co-ordinated behaviour.

This proposal is presented in the discussion document as replacing New Zealand's current merger prohibition with that of Australia's, i.e.:

> *No person shall acquire assets of a business or shares if the acquisition would have the effect, or be likely to have the effect, of* ***substantially lessening competition*** *in a market for goods and services*

Australia made the same "dominance" to "substantially lessening of competition" change in 1993.

5.1 Benefits of a competition test

There are likely to be a number of benefits from subjecting potential mergers to a 'substantially lessening competition' test, rather than a 'dominance'[18] test. In particular a competition test would:

- allow mergers to be scrutinised in terms of the competition and efficiency effects of joint dominance, including the potential for collusion, both explicit and tacit;

- provide a sharper focus for the Commerce Act in promoting competition and efficiency. Currently New Zealand's dominance threshold presupposes that economic efficiency always requires very high market concentration. A competition test would provide a sounder framework for examining the competition and efficiency effects of merger. The competition effects would be examined first and then via authorisation[19], the efficiencies of any merger can be balanced against any anti-competitive effect;

- provide greater scrutiny of mergers occurring in the non-tradeable sector of the economy. This will be beneficial, as mergers within this sector are likely to pose the greatest risk in terms of inefficient outcomes, as the non-tradeable sector is not subject to the pressures of international competition. Greater scrutiny of merger proposals will also be of benefit in recently deregulated industries. In these industries the dominance threshold can offer little

guarantee against an inefficient outcome. These losses may be so significant that they erode the efficiencies gained through deregulation;

- achieve consistency in the treatment of restrictive business practices (that fall outside abuse of dominance) and mergers. Anti-competitive outcomes can be the same whether achieved through contract (arrangement or understanding) or through merger. The only real difference is one of form. If anything the law should be tougher on mergers because it is the most enduring form of agreement between firms. If firms merge than the opportunity for competition between them is gone; and

- be preferable for a small economy, where high domestic market concentration is a pervasive feature, and a permissive merger threshold may entrench monopolistic and oligopolistic elements in the market. In such markets, although the merger itself may generate efficiencies, these efficiencies may be eroded over time through the incentives to reduce output and increase price, and to a lesser extent through organisational inefficiencies.

5.2 The costs of broadening the threshold

Although adopting a competition test for mergers is likely to be of net benefit, the change to a broader threshold will impose some costs on the economy. These costs mainly arise from the increased number of mergers scrutinised that are, subsequently, blocked.

It appears from the Australian experience in changing the merger threshold from 'dominance' to 'substantially lessening competition', that although more mergers will be scrutinised given the authorisation procedure, only slightly more will be opposed[20]. It is likely that New Zealand's experience of a changed threshold would be similar to that of Australia's.

The increased number of mergers scrutinised will impose an increase in administration costs for the Commerce Commission and an increase in compliance costs for firms. The compliance costs for firms include the costs involved in applying for clearances and authorisations, and any additional costs if the Commission's decisions are challenged in the courts.

Altering the threshold for mergers could also create a degree of business uncertainty, to the extent that participants would be unclear of the legal consequences of proposed mergers, particularly in the first years of the new threshold. However, as the 'substantial lessening of competition' test applies in section 27 of the Commerce Act, uncertainty should be minimal. As well, merger decisions from the ACCC and from the Australian courts will provide useful guidance for the New Zealand business community, and the Commerce Commission issuing revised merger guidelines could further reduce uncertainty.

6. Conclusion

New Zealand recognises the economic harm that can result from oligopolistic co-ordination and that this harm can be minimised through the use of competition law. However, currently the Commerce Act 1986 lacks a mechanism to respond to tacit collusion.

The Government has released a public discussion document proposing that merger control be used to reduce the likelihood of oligopolistic coordination in the New Zealand economy. It is recognised that sole reliance on merger control has its limitations. Specifically it can not prevent tacit collusion occurring in oligopolistic markets already in existence, and those that result from technological advantage and other key sources of firm expansion and exit.

New Zealand does not have the experience that other OECD countries have in attacking tacit collusion through the use of behavioural prohibitions. However, in its analysis, it is not certain that employing behavioural remedies to complement merger control will yield a positive outcome. It can be very difficult to distinguish between pro- and anti-competitive parallel behaviour, as such parallel conduct is to be expected in markets for homogeneous products, such as cement, petroleum, banking and insurance. Behavioural remedies in comparison with merger control are likely to be associated with significant costs such as the costs of judicial error, increased uncertainty, and deterred commercial activity[21]. These costs may be so significant that they overshadow the economic benefits derived from reducing tacit collusion across the economy.

NOTES

1. Scherer and Ross, *Industrial Market Structure and Economic Performance,* (Boston:Houghton Mifflin, 1990) p 226.

2. IEA, *Energy Policies of IEA Countries: New Zealand 1997 Review* (Paris: OECD 1997) p 9.

3. *Petrol Prices: An Investigation into Petrol Prices in New Zealand,* NZIER, Report to the Ministry of Commerce, 1996.

4. New Zealand's competition authority.

5. Cited in Berkahn, M. 'Shared Monopolies and Tacit Collusion: Applying Competition Law to the Petrol Industry', *New Zealand Business Law Quarterly* Vol. 4 May 1998 p 103.

6. Iibid

7. Berkahn op cit p.104

8. ibid.

9. For example - *Lion Corp Ltd v Commerce Commission (this was a merger decision).*

10. Berkahn op cit p.104

11. ibid

12. That is sections 27, 36 and 47.

13. Scherer and Ross p 315.

14. Baker, J.B. 'Two Sherman Act Section 1 Dilemmas: parallel pricing, the oligopoly problem and contemporary economic theory', *The Antitrust Bulletin* Spring 1993 pp. 151-152.

15. ibid p 181.

16. Chamberlin, E.H., *Duopoly: Value Where Sellers are Few*, 43 Q.J. Econ. 63 (1929)

17. This does not imply that the actions of firms who achieve market power through some technological advantage are anti-competitive.

18. In the New Zealand context 'dominance' means single firm dominance.

19. New Zealand operates an authorisation procedure for mergers. Mergers that will result in the acquisition or strengthening of dominance, may be authorised where there is likely to be a benefit to the public that outweighs the anti-competitive detriment. This is, in effect, an efficiencies exception.

20. However, it is not known how many merger proposals were deterred by the change in threshold as such proposals would not have been referred to the ACCC.

21. Merger control will impose these costs too but to a lesser extent.

Appendix

The current scope of New Zealand's merger review

New Zealand has a permissive approach to merger review in comparison with other OECD countries. This is reflected in the threshold that New Zealand's competition law uses to capture for scrutiny those changes in market structures that are likely to result in significant economic harm. The relevant prohibition is section 47 of the Commerce Act 1986 which prohibits business acquisitions that are likely to result in the acquisition of, or strengthening of, a dominant position in a market.

New Zealand operates an authorisation procedure for mergers. Authorisation balances the likely efficiencies gained through merger, against the detriment of reduced competition. Mergers that will result in the acquisition or strengthening of dominance, may be authorised where there are likely to be public benefits that outweigh the anti-competitive detriment.

In assessing applications for mergers and acquisitions the Commerce Commission, has identified certain "safe harbours". These "safe harbours" reflect the Commission's view, of where a dominant position in a market is generally unlikely to be created or strengthened following a merger or acquisition. "Safe harbours" exist where:

- the merged entity (including any interconnected or associated persons) has less than in the order of a 40 percent share of the relevant market; or

- the merged entity (including any interconnected or associated persons) has less than in the order of a 60 percent share of the relevant market, and faces competition from at least one other market participant having no less than in the order of a 15 percent market share.

The Commission will not, except in unusual circumstances, seek to intervene in business acquisitions which, given the appropriate delineation of the relevant market and measurement of market shares, fall within these safe harbours.

In practice, a study of the Commission's decisions on business acquisitions, made over the period January 1991 to December 1996[1], suggests that:

- in assessing dominance the most important factors are: market share, barriers to entry, the constraint provided by imports and the presence of other competitors; and

- dominance was found in markets only where the share of the parties exceeded 70 percent, and then only in some cases.

NOTE

1. '*A Study of the Commerce Commission's Evaluation of Applications for Business Acquisition Clearances and Authorisations, 1991-1996*', Commerce Commission, Occasional Paper No. 8 February 1998, p. 23.

NORWAY

Using prohibitions on horizontal agreements to attack co-ordinated pricing or other behaviour harming consumers

1. Introduction

The Norwegian Competition Act prohibits all agreements and concerted practices between undertakings that constitute price fixing (section 3-1), bid rigging (section 3-2) and market sharing (section 3-3). Section 3-1 of the Act also prohibits resale price maintenance. The Competition Act does not contain any general provision that prohibits agreements or concerted practices that restrain competition. Nor does the Act contain a provision that prohibits abuse of a dominant position. However, pursuant to section 3-10 of the Competition Act the Norwegian Competition Authority may intervene against agreements, concerted practices or unilateral conduct that restrain competition contrary to the purpose of the Act.

The competition rules in the European Economic Area Agreement (EEA) are applicable to undertakings in Norway and are the equivalent to the competition rules in the EC Treaty and the ECSC Treaty. The Norwegian Competition Authority has only investigative powers under the EEA Agreement, it does not have enforcement powers. The situation under the EEA competition rules will not be dealt with below.

2. Remedies available against violations of the prohibitions in the Competition Act

Two remedies are available, criminal penalties and relinquishment of gain.

The Norwegian Competition Authority investigates suspected violations of the competition Act. If the Norwegian Competition Authority considers that an infringement has taken place there are two procedures available of which one must be chosen.

First, the case can be transferred to the prosecuting authorities. The case is then a criminal case and criminal procedure applies. A violation of the Competition Act must be proved beyond reasonable doubt. In a criminal case the colluding undertakings, as well as the responsible persons in those undertakings, can be fined. Natural persons can also be sentenced to up to three years' imprisonment, in aggravating circumstances six years. In practice only fines have been imposed.

The level of fines imposed under Norwegian competition law is generally considered lower than the level of fines imposed under EC/EEA competition law.

If undertakings (or natural persons) are convicted in a criminal case and gain has been achieved by the infringements, the convicted can be required to relinquish any such gain, in addition to paying a fine.

Second, the Norwegian Competition Authority has the power to issue a writ giving an option of relinquishment of gain.

If the Norwegian Competition Authority issues a writ giving an option of relinquishment of gain the undertaking may accept the Authority's decision and relinquish the gain estimated by the Authority. The case is then closed.

If the undertaking does not accept the Authority's decision, the Norwegian Competition Authority may start legal proceedings against the undertaking under the rules of civil procedure. Proof beyond reasonable doubt is not required, thus an infringement would be easier to prove than in a criminal case. On the other hand, relinquishment of gain is supposed to have lower preventive effects compared to fines.

So far the Norwegian Competition Authority has not used this procedure, partly due to difficulties in estimating gain achieved by collusion. However, there has been some progress in developing methods for estimating gain and this procedure might be used in the near future.

3. Circumstantial evidence in criminal and civil proceedings

Norwegian criminal procedure as well as civil procedure contain few formal limitations on the form of evidence that can be submitted in a court case. The main rule is that all kinds of circumstantial evidence can be submitted in both criminal and civil proceedings.

Plausible circumstantial evidence in a competition case could be expert reports on market information and market analysis, proof of parallel pricing (that can not be explained solely from market conditions), uniform price increases following meetings between the competitors etc.

The courts will assess the totality of the evidence, but will not expressly evaluate every single piece of evidence. It is therefore difficult to tell how courts emphasise the different types of evidence produced in a case.

If the defendants contest that there has been any form of agreement or concerted practice and no directly compromising documents has been found, a case would have to be based on circumstantial evidence alone.

As mentioned above, the burden of proof is different in criminal and civil proceedings. This might affect the court's assessment of the submitted evidence. Facts based on circumstantial evidence might be more easily accepted in civil proceedings. In a criminal proceeding the burden of proof makes it difficult to establish an infringement solely on circumstantial evidence.

Till now, only criminal procedure has been used and no case under the Norwegian Competition Act has yet been based solely on circumstantial evidence. There has always been some kind of direct evidence supporting the case. One reason for this could be that circumstantial evidence seldom would suffice to prove collusion beyond reasonable doubt.

4. The Corrugated Cardboard Case

The so-called Corrugated Cardboard Case is the most prominent case under Norwegian competition law concerning price fixing practices. This case was a criminal case.

The case concerned four big corrugated cardboard manufacturers in Norway holding approximately 95 percent of the market. About 95 percent of the production is produced according to

customer specifications. Only 5 percent of the production is standardised. Production is often small scale and market demands are not price sensitive. Quality and supply certainty is important for the customer. Imports are low, due to high transportation costs and other market characteristics.

This case was decided under the Price Act, which was replaced by the Competition Act 1 January 1994. Secondary legislation under the Price Act, Royal Decree of 1 July 1960 section 1, contained a price fixing prohibition. This prohibition was of the same type as section 3-1 of the Competition Act, which states in the first paragraph:

> "Two or more undertakings must not, in connection with the sale of goods or services by agreement or concerted practices, or by any other conduct liable to influence competition, fix or seek to influence prices, markups or discounts except for normal cash discounts…"

The Cardboard Group and later the Norwegian Corrugated Cardboard Association (NCCA), which was founded in 1961, was a trade association founded by the corrugated cardboard manufacturers. Through this association the manufacturers were granted an exemption from the price fixing prohibition. This exemption allowed the manufacturers to use an internationally developed calculation program for corrugated cardboard manufacturers. The calculation program estimated the normal price per order that a manufacturer ought to obtain to fulfil profit demands. By comparing actual price and normal price a manufacturer would continuously have an overview of whether sales revenues developed according to profit demands. The manufacturers were allowed to use the same input parameters when calculating prices.

The exemption stated that prices could not be increased without permission from the Price Authority. Thus, the manufacturers were allowed to collaborate on prices under the supervision of the Price Authority.

With effect from 1 January 1983 the exemption was withdrawn. The NCCA nevertheless continued to exist.

The City Court of Oslo found in its judgement of 12 July 1994 that manufacturers had increased prices 9 times during the period from 1983 until 1990. The price increases took place simultaneously or almost simultaneously and were uniform or almost uniform. The Court found that the submitted evidence proved beyond reasonable doubt that each of the manufacturers had continued to use the calculation program when pricing their products and that the manufacturers had collaborated when deciding what parameters to put into the program.

The evidence in Corrugated Cardboard was substantial and consisted inter alia of minutes from meetings where parameters had been discussed, documentary evidence from dawn raids showing how the calculation system had been applied by the defendants, testimonies from customers that had experienced uniform pricing practices, testimonies from the accused chief executive officers and expert reports. Two experts were appointed by the City Court of Oslo. These experts wrote additional reports for the Supreme Court. The expert reports contained a description of the market characteristics and an analysis of price levels, but were mainly used to prove if or to what extent gain had been achieved by the infringements. Thus the case was, as far as the question of guilt is concerned, mainly based on direct evidence and only to some extent supported by circumstantial evidence.

The undertakings as well as their chief executive officers were fined and the undertakings involved were required to relinquish the gain achieved by the infringements.

The judgement was appealed to the Supreme Court. The question of guilt, however, was not decided upon by the Supreme Court.

In Corrugated Cardboard fines amounted to approximately NOK 15 million (EURO 1.75 million) altogether and gain achieved by the infringements amounted to approximately NOK 8 million (EURO 900.000).

5. Prohibition of anticompetitive horizontal agreements - concerted practices or unilateral conduct

The Competition Act prohibits agreements as well as any form of concerted practice. Courts must thus distinguish between concerted practices and unilateral conduct. There is limited case law on this question, but the Norwegian Competition Authority considers that this distinction must be drawn mainly in the same way as under EC/EEA competition law.

If "tacit collusion" is understood as "an agreement proved through circumstantial evidence" (Baker p. 145) tacit collusion is covered by the term ”concerted practice” in EC competition law terminology. The term “concerted practice” has been defined by the European Court of Justice as “a form of co-ordination between undertakings which, without having been taken to the stage where an agreement properly so-called has been concluded, knowingly substitutes for the risk of competition practical co-operation between them” (Wood Pulp, [1993] ECR I-1307). The prohibitions of the Norwegian Competition Act cover this form of collusion.

However, the term “tacit collusion” can also be used to describe the situation where oligopolists are able to raise prices merely by “interacting while recognising their interdependence” (Baker p. 145). Used in this way, there seems to be little difference between the terms “tacit collusion” and “conscious parallelism”.

The term “conscious parallelism” seems to mean that undertakings adapt themselves unilaterally to the existing and anticipated conduct of their competitors (Wood Pulp). Albeit never tried in court, conscious parallelism, as here defined, is not in itself considered to violate the prohibitions of the Competition Act. Further evidence should be provided. However, there is no judicial precedent on the question of which additional factors that would be needed to establish an infringement.

One example may illustrate the line between legal and illegal practices.

The case illustrates the problem of proving collusion when no direct evidence can be found. There are two major companies delivering product X for industrial use. Customers need additional service and storing equipment. This is normally delivered by the same company delivering X or by its sales agents. Originally company A was the only company on the market. When company B entered the market a price war broke out and lasted for several years. Then the mother company of A was restructured and A was bought by company C. After this restructuring period the market shares of A and B stabilised, with company A holding 40 percent and B holding 60 percent of the market.

The Norwegian Competition Authority received information from several customers independently suggesting collusion between the two companies, and some investigative measures were taken.

On this market a new firm would have to build up an extensive distribution system, i.e. a network of sales agents and a delivery system. This could be seen as a barrier to entry that made the market conducive to co-ordination. Futhermore, during the investigations the Norwegian Competition Authority found that the smaller company did not seem to consider the larger company as a threatening rival, but was very concerned that a new seller would enter the market.

Information from customers, some documentary evidence and market data as well as the fact that A and B met three or four times during one year, seemed to suggest that there was an agreement between the competitors not to capture each other's customers. Such an agreement would be an infringement of the prohibition against market sharing. However, traces of an express agreement were never found and it was considered impossible to prove whether an illegal market sharing conspiracy took place or whether there merely existed a balance of terror between the two competitors. Thus, no proceeding was initiated.

The question is when a practice like this would be an infringement of the prohibitions of the Norwegian Competition Act.

If a practice where competitors had agreed not to capture each other's customers was established through direct communication between the parties, the practice would obviously be an infringement of the market sharing prohibition. The problem would be to prove what had actually happened.

On the other hand, a practice as described above could also be the result of independent decision making. That would be the case in the following example: One of A's sales agents (accidentally) steals away some of B's customers in a geographical segment of the market. B recognises that A has increased his market share in this segment and retaliates by cutting prices in the same segment or in a neighbouring segment. Subsequently B re-establishes his market position vis-à-vis A. From this experience A might conclude that he should not steal away B's customers, because this leads to retaliation from B. B might reason the same way or he might experience the same kind of retaliation strategy from A when trying to capture some of A's customers. Thus, B might conclude that attacking A would not be a sound strategy. In this way co-ordination could be established without infringing the Competition Act.

Some indirect communication between the parties might have taken place in a case like this, for instance through the trade press, through information exchange agreements, or through communication from one competitor to his sales agents which is picked up by the other competitor through his network of sales agents. If it could be proved that the parties in this way intended to signal future market conduct to each other, it is possible that the Competition Act would have been violated. On the other hand, if the indirect communication was a side effect of legitimate business actions it would be more doubtful whether a violation of the Competition Act had occurred.

The outcome that A and B would not try to capture each other's customers could be self-evident given the market structure and pre-existing market developments. If this was the case, direct or indirect communication between the parties would not be necessary to establish co-ordination. Thus such communication would seem irrational. On the other hand, this argument presupposes that the competitors realise that co-ordination can be established without direct or indirect communication, that the competitors think that indirect communication is or could be illegal, that the competitors find it plausible that the illegal practice can be proved and that the Competition Authority will react against such a practice. Thus, there might still be some logic explanation for this kind of communication.

6. The application of prohibitions on anticompetitive horizontal agreements to outlaw "facilitating practices"

In general the prohibitions of the Competition Act will not outlaw practices which tend to make it easier for firms to co-ordinate their behaviour in an anticompetitive manner, to detect divergence form co-ordination or to punish such divergence.

The price fixing prohibition of the secondary legislation under the Price Act, Royal Decree of 1 July 1960 section 1, contained a provision in paragraph c) that prohibited some forms of facilitating practices. The price fixing prohibition stated:

> "Associations or groups of enterprises may not establish or maintain such regulations for the sale of commodities or for the rendering of services as entail:
>
> a) The fixing of prices or profits or the issuing of directions as to how the enterprises themselves may determine their prices or profits;
>
> b) The stipulation of additions or rebates apart from ordinary cash discount;
>
> c) That enterprises shall report to a joint body their prices, profits, additions or such rebates as are covered by b);
>
> d) Other regulations with regard to prices, profits, additions or such rebates as are covered by b)"

There is no equivalent to Section 1, paragraph c) in the Competition Act.

The Norwegian Competition Authority has experienced some information exchange arrangements between competitors but there is no case law on this point.

Announcements of prices followed by parallel pricing conduct could be considered an infringement of section 3-1 (as in the EC *Dyestuffs* case, [1972] ECR 619). The defendants might argue that they as oligopolists only had adapted themselves intelligently to existing and anticipated conduct of their competitors. Establishing sufficient evidence for a penalty case could be difficult because collusion would have to be proved beyond reasonable doubt.

An information exchange agreement where detailed individual information on transactional prices and market shares was exchange on a regular basis between competitors was seen in the *UK Agricultural Tractor Registration Exchange* (ECJ C-7/95 and C-8/95, CFI T-34/92 and T-35/92, [1994] ECR II-905, [1994] ECR II-957,). This agreement was prohibited under EF art. 85(1). Whether a practice like this would be considered illegal under the prohibitions of the Norwegian Competition Act is more doubtful. In *UK Agricultural Tractor Registration Exchange* the agreement was not considered a price fixing or market sharing agreement, but was nevertheless a restriction of competition.

However not illegal in itself, an information exchange agreement or practice might be a useful tool for monitoring a cartel and could suggest that the parties were taking part in a price fixing or a market sharing cartel. An information exchange agreement or practice could therefore be used as a piece of circumstantial evidence of price fixing or market sharing collusion.

Even though an information exchange agreement or practice might be considered not to constitute an infringement of the prohibitions of the Competition Act, pursuant to section 3-10 of the Competition Act the Norwegian Competition Authority has the possibility of intervening against such agreements or practices if they restrain competition contrary to the purpose of the Competition Act.

Reference

Jonathan B. Baker; Two Sherman Act section 1 dilemmas: parallel pricing, the oligopoly problem, and contemporary economic theory; The Antitrust Bulletin/Spring 1993

SWEDEN

1. Oligopolistic markets and natural monopolies, networks and essential facilities

1.1 Introduction

In oligopolistic industries, "network facilities" may be created and the firms controlling the network may choose to exclude smaller rivals. Such activities cannot always readily be classified as collusion – as there may be no overt agreement, but strong incentives for a parallel behaviour that results in the smaller firms being excluded. Nor may those activities readily be classified as abuses of a dominant position, as no single firm controls the network. Perhaps the essential facilities doctrine can be used to resolve this dilemma, as it appears likely that compulsory access is more reasonably applied to a multi-firm network than to many classical natural monopolies.

1.2 Natural monopolies

According to the definition nowadays accepted in the economics literature, an industry is a natural monopoly if, over the relevant range of outputs, the cost of production is always less if only one firm produces than if two or more firms produce. Such a situation may prevail, e.g., if fixed costs are important. However, society may even so be better off if production is split between two or more firms, for two reasons. First, a monopoly firm may charge prices well above costs, with the result that a sub-optimal quantity is brought to the market. Second, a monopoly firm has less incentive to control actual costs; although costs theoretically are lower for a single firm, costs may in practice be lower when two firms compete, due to less X-inefficiency.

However, in certain instances, the additional costs brought about by duplication of facilities is so large that it is more desirable to have only one firm engage in production. In such circumstances, different regulatory measures have been employed. Some measures are directly aimed at behaviour, e.g., price-caps, rate-of-return regulation and (competition law) prohibitions against excessive (or unfair) prices. Other measures are structural or else intended to affect the market structure, e.g., divestitures, separation of infrastructure from operation and prohibitions against predatory behaviour and measures to lower entry barriers. Yet in other circumstances, the monopoly has been allowed to profit (perhaps with some moderation) from its dominant position, as it has, often correctly, been regarded as just compensation for past and present risky investments and as a good incentive for future investments.

1.3 Essential facilities

The "Essential facility doctrine" affords the competition authorities an instrument that is aimed partly against the structure, partly against the behaviour of the monopoly. The price of an intermediate good is indirectly regulated, in that the monopoly is required to supply competing firms at a "non-discriminatory" price. This will allow competing firms to engage in downstream production, and hence have an effect on the structure *of a stage of production other than that which is monopolised*. This, in turn, is expected to result in a price of the final good closer to the efficient level. One advantage of this instrument is that it alleviates the problem of finding the "correct" maximum price for the monopoly.

Under traditional price regulation, this maximum price must be found by the authorities, while much of the supervision and expertise needed for application of the essential facility doctrine are supplied by the competing firms. Another advantage is that this "indirect price regulation" can be deployed at one stage of production only – the critical stage where natural monopoly prevails – and not on a complex chain of production stages.

The essential facility doctrine has typically been employed when the monopoly position, in some sense, is a "windfall gain", due to, e.g., geography (a natural harbour, a tunnel) or a previous legal monopoly situation (local telecom networks). Not so often has the doctrine been used when the monopoly position is the result of investments in, e.g., research and development. (On the other hand, the limited duration of patents resolve that problem in due time.) Such facilities, often of the "steel and concrete"-type, appear to be of a type that were more common in the earlier stages of industrial evolution.

At present, the essential facilities doctrine appears to be in a state of disgrace. Certainly, this instrument must be applied only under the strictest conditions. However, it appears that the doctrine allows a measure that falls somewhere between the heavy-handed application of Article 86 of the Treaty of Rome to "unfair" (i.e., excessive) prices, that almost amounts to price regulation, and challenges against predatory behaviour, that have as their aim to preserve or create a more competitive market structure.

1.4 Networks and access

Whereas natural monopolies are often found in stagnant industries, "networks" are quintessential in many of today's growth industries in IT and communication. Networks, just as natural monopolies, have the property that duplication is often not desirable. However, the causes for this stem from the *demand* side, not from the *supply* (or cost) side. A single network is desirable because consumers are better off the more consumers that are connected to, or use, the network they themselves patronise. In a market that is a natural monopoly, a single producer is desirable because this gives the lowest total cost of production. Another fundamental difference between networks and natural monopolies is that the former, by their very nature, often are built by a number of firms who have chosen compatible technologies. This makes application of the essential facility doctrine more difficult, since no single firm is dominant, and since it may not always be evident that the larger firms collude in blocking smaller firms from joining the network. In fact, it may often be in the interest of each individual large firm to block entry of all small firms. In the literature on the economics of networks, it is well established that incumbent firms have incentives to allow only large firms to join existing networks, as they bring many customers and hence increase the value of the network for all. Small firms, on the other hand, bring few customers, but stiffen competition. When entry is hence blocked, networks may serve to encourage collusion between its member firms.

However, from an economic point of view, it seems that sound application of the essential facility doctrine, *or some other measure that allows society to benefit from both competition and large network effects*, is likely to be at least as desirable in a networks industry as in a natural monopoly industry. Maybe such policies are even more warranted in network industries, as they, by their very nature, are such that allowing access is beneficial. "Requiring the ... collaborators to admit others at the outset would chill the combination only if its purpose were indeed to exclude rivals", as Philip Areeda notes in an article that is otherwise critical of the extensive use of the essential facilities doctrine.[1] Areeda lists a number of reasons why the essential facilities doctrine should be applied more readily when the facility is owned jointly by two or more firms.

It must also be noted that the trade-off between, on the one hand, exclusivity and the ensuing incentives for investment, and, on the other hand, access and competition, is often not a real conflict. If most, or all, large firms form a joint network, allowing smaller firms to join is not likely to dampen the

incentives for investment. On the contrary, exclusivity may well serve to cement an old industry structure and an old technology.

1.5 Collective dominance

The concept of collective dominance extends the application of prohibitions against abuses of dominant positions to markets where no single firm is dominant, but where a small number of large firms are jointly dominant. If the owners of the asset that constitutes a network are found to be jointly dominant, this could bring the prohibition against abuse of dominance in effect, and hence make possible the use of the essential facility doctrine. However, although collective dominance could in principle be found when no anti-competitive agreements can be established, the legal experience has shown that demonstrating collective dominance in cases of abuse of a dominant position almost amounts to demonstrating that the firms are colluding. Potentially, networks might be controlled by firms that are neither dominant (collectively or individually), nor clearly colluding.

1.6 Conclusions

The conclusion of the above analysis is that in oligopolistic industries where networks are important, the large firms may prevent their smaller rivals from joining the network. This behaviour does not obviously fall under either of the two categories “abuse of dominant position” or “illegal collusion”, although the intent and/or the effect may be clearly anti-competitive and to the detriment of consumers. Neither is it clear that the individual owners of the network’s components can be seen as collectively dominant.

Furthermore, it appears that a strict enforcement of a pro-competitive policy may increase welfare, in the short run as well as in the long run. The difficulties in employing the existing legislation for that purpose is clearly illustrated by a case on access to the network of ATMs (Automated Teller Machines) in Sweden. This case, *Bankomat*, and two related cases, are described below.

2. Three cases relating to payment systemsBackground

During the 1980s, the Swedish financial markets were deregulated. This permitted entry of foreign banks and upstart domestic banks into the Swedish market. The former focused on commercial banking, while the latter focused on retail banking. Access to the payment systems is most critical for banks competing in the retail segment.

2.1 CEKAB – Automated Clearing House

CEKAB is an automated clearing house that is jointly owned by three of the four large Swedish banks[2] as well as by a large Danish bank, which operates a medium-sized branch in Sweden. CEKAB is a switch that is vital for both the ATM-market and the POS-market. POS (Point-Of-Sale) terminals are installed in shops, restaurants etc., to facilitate payment by credit or debit cards.

In the ATM-markets, CEKAB connects the ATMs with the account system of the bank of the ATM-card holder – for the owner-banks and for other banks that are active in retail banking.

In the POS-market, CEKAB connects the terminals to the shop owners’ banks and to the card holders’ banks. The number of ATM and POS transactions are each over a hundred million per year with a total underlying value of around 15 billion Euro. To a large extent, CEKAB is a computer system for

transaction data. In addition, CEKAB provides management and services of ATMs for banks that do not wish to manage and service their own ATMs.

Since CEKAB is jointly owned by competing banks and constitutes an agreement between competing firms, it falls under the prohibition against anti-competitive agreements and concerted practices in the Swedish competition law (corresponding to Article 85 of the EC Treaty). Although three of the four large banks operate their own switches, there is no alternative to CEKAB for small banks that wish to provide ATM and credit and debit card services to their customers; even the three banks with own switches are to a large extent dependent on CEKAB. Some of CEKAB's smaller customers have claimed that they are discriminated against, in that they have to pay higher per transaction prices than the owner- banks and since they have to pay an annual fee which is not fully motivated by costs that are incremental to additional customers. The owner-banks claim that lower prices for them are warranted, since their large number of transactions lowers the average transaction cost significantly and since they stood the risk of establishing CEKAB, and that the annual fee *is* motivated by incremental customer costs.

The Swedish Competition Authority has questioned the validity of the calculations forming the basis for the annual fee as well as the justifications for the rebates for large customers. Excessive prices for the switch may reduce competition in the downstream retail banking market. Because of this, the Authority found that the agreement restricted competition. One argument against large-customer rebates is that, in this case, their only effect is to increase the price of small customers – since the prices are in practice set equal to average costs and since the smaller banks' share of the number of transactions is so small. The case is pending court decision.

2.2 BGC – credit transfer clearing house

BGC is a clearing house for credit transfers that is jointly owned by the four large banks and three smaller banks. At the initiative of the payer, a payment is transferred from the payer's bank account to the payee's bank account. BGC handles approximately 300 million paper-based and electronic credit transfers (including transfer of wages, salaries, taxes and ordinary bills, for households and corporations) per year, with an annual total value of approximately 300 billion Euro.

From the final customer's point of view, the competing PG credit transfer system, owned by the Swedish Postal Office, is a good substitute for most purposes. However, for a bank that wishes to be a serious competitor in the retail market, it is necessary to be connected to BGC. The conflict between owner banks and non-owner banks and the arguments invoked are to a large extent parallel those in the CEKAB case. As in the latter case, the prohibition against anti-competitive agreements could for similar reasons be applicable. The Swedish Competition Authority has not yet decided whether negative clearance or individual exemption will be granted.

2.3 Bankomat – ATMs

Under the trademark *Bankomat* and in a jointly owned company, *Bankomatcentralen*, the Swedish commercial banks created a network of ATMs, in competition with the saving banks' *Minuten* system. In the mid-1980s, the title of the ATMs was transferred to the individual banks, and in 1989 the switch was transferred to the above mentioned company CEKAB, at that time recently established. After the break-up, the interchange fees and other access conditions were regulated by a multilateral agreement. After the entry into force of the new EC-style Swedish competition law of 1993, the multilateral agreement was replaced by a number of bilateral agreements. Bankomatcentralen still controls the trademark Bankomat, while CEKAB owns the switch.

In 1993, the bulk of the savings banks were transformed into one limited company bank. Following this event and a subsequent merger involving the former major saving bank[3], the Bankomat network and the Minuten network have been technically integrated into one network over the last couple of years and the trademark Minuten is being phased out.

The principal cause for conflict is that the small banks have to pay interchange fees to the large ATM owner-banks that are well above costs. In some cases prohibitively high interchange fees have been demanded. However, from a practical point of view, the international VISA and MasterCard agreements for access to ATMs, which apply to small and large banks alike cap the interchange fees. These interchange fees, although well above costs, provides a ceiling for the small banks' interchange fees.

3. Conclusions

Even though the Bankomat/Minuten network is dominant in the Swedish ATM market – in fact it is virtually the only system of ATMs - it is not obvious how the competition law can be applied. Before the integration of the two ATM systems, no single system was clearly dominant.

The prohibition against anti-competitive agreements is clearly applicable to CEKAB, but this function may be dispensable (at a non-trivial cost) for the banks that have their own switches. In addition, the cost attributable to the central switch is a relatively small fraction of the total cost of the ATM network. As an alternative, the prohibition against abuse of dominant position (corresponding to Article 86 of the EC Treaty), may be applied. However, there are a number of switches for ATM and POS transactions (although with somewhat different functions), rendering the question of dominance a difficult one. The collective dominance alternative may possibly be pursued, but reliance on the prohibition of anti-competitive agreements appears to be a more practicable alternative.

The economic conditions for access to the common trademark Bankomat may also fall under the prohibition against anti-competitive agreements. The trademark, however, may be dispensable. Some ATMs are now marked with the generic "Withdrawal". Again, single dominance or collective dominance may be alternative approaches.

The rest of the Bankomat network is comprised of the individually owned ATMs. No single bank is dominant in the market for the provision of ATM services. Although the banks are co-operating and in some sense colluding (through a net of bilateral agreements) in the market for ATM services, which is a bank input market, there is no clear evidence of collusion in the retail banking market, where the banks sell their services to individual customers. Collective dominance is a potential avenue for challenging the large banks' alleged discriminatory terms of access, but the problems of this "avenue" are well known. In this case, however, the supposition that the banks are collectively dominant is strengthened by their co-operation in CEKAB and Bankomatcentralen.

More generally, in oligopolistic markets – like the Swedish bank market – the individual firms may have incentives to form networks from which smaller rivals are excluded. The decision to exclude these smaller firms may not necessarily be a collective one; it may be individually rational for the large firms not to grant access to a small rival. When the firms that control the network have to own assets jointly, there will be an agreement between the firms, and the prohibition of anti-competitive agreements *or* the prohibition against abuse of dominant positions may be applied. The former may in some situations be preferable, since dominance is not a requisite. However, when the network is comprised of assets that are owned individually by each firm, then the prohibition against anti-competitive agreements may not always readily be applied, as demonstrated by the Bankomat case.

Prohibition against abuse of individual or collective dominance may then be an alternative, if the network is indeed dominant. Another alternative that may be considered is to extend the applicability of the essential facility doctrine to cover situations where the facility is comprised of individually owned assets.

Irrespective of which legal approach is employed, it appears clear that the economic justification for allowing smaller firms to join a monopoly network controlled by larger firms are just as solid, or more solid, as the justifications for allowing small firms access to natural monopolies.

Concerning the three cases discussed above, the final decisions from the legal instances have yet to materialise. As always, the essential facilities doctrine must only be applied under the strictest conditions. In particular, it must not be applied in order to achieve short-term gains from increased competition that in turn will hamper investments and result in long-run inefficiencies. Furthermore, even if actions that facilitate smaller banks' access to the financial networks are found to be desirable, it is not clear that this is best achieved with the essential facilities doctrine.

NOTES

1. Areeda P., Essential facilities: An Epithet in Need of Limiting Principles, Antitrust Law Journal, vol. 58, 1990.

2. Handelsbanken, FöreningsSparbanken and Nordbanken, with total assets of approximately 50-100 billion Euro each. Nordbanken is the Swedish subsidiary of the Finnish Merita-Nordbanken. SEB, not one of CEKAB's owners, is the second or third largest bank, in terms of total assets. The combined market share of the four leading banks is around 85 percent.

3. Sparbanken, the former major savings bank, and Föreningsbanken merged into FöreningsSparbanken.

SWITZERLAND

1. Employing merger review to reduce the probability of anticompetitive co-ordinated effects

a. Can mergers be blocked under your law because of anticipated anticompetitive 'co-ordinated effects'? Do such co-ordinated effects include more than would be actionable under your law as prohibited anticompetitive agreements or abuse of dominance/monopolisation? If so, please identify the extra effects reached.

- *Can mergers be blocked under your law because of anticipated anticompetitive 'co-ordinated effects'?*

First a remark to terminology: with reference to the established practice in the European Union, also in Switzerland we speak rather of "collective dominance" or "oligopolistic dominance" than of "anticompetitive co-ordinated effects". In what follows, we will therefore use this terminology.

The concept of collective dominance is applied in Switzerland in the framework of the Federal Act on Cartels and Other Restraints of Competition (Act on Cartels, Acart) of 6 October 1995. So far, the Swiss Competition Commission (henceforth referred to as the Commission) has resorted to the concept in three cases. The first time it was applied in the merger case Revisuisse Price Waterhouse / STG-Coopers & Lybrand (RPW/STG-C&L; published in *Law and Politics of Competition, LPC, Berne 1998/2*; pp. 214); a second time when examining the merger of Union Bank of Switzerland with Swiss Bank Corporation (UBS; *LPC 1998/2*; pp. 278), and most recently in the case SEG Poultry Ltd. / Bell Ltd. (Bell-SEG; *LPC 1998/3*; pp. 392).

In the case Bell-SEG, the Commission concluded that the take-over of SEG poultry Ltd. (a poultry slaughter-house) by Bell Ltd. (a large butchery and subsidiary company of the Swiss retailer Coop) would create a situation of collective dominance. Consequently, the project was only accepted under certain conditions (obligation by Bell Ltd. to sell one of its units). In the case RPW/STG-C&L, a position of collective dominance was very unlikely given the anticipated aggressive competitive behaviour of at least two strong competitors, a lack of market transparency and the strong position of buyers. In the UBS case, the question of whether or not the operation would have led to a situation of collective dominance went unanswered, because there remained no further competitive concerns once the banks accepted the conditions imposed by the Commission (obligation to sell several subsidiaries in different regions of the country).

Up until today there have not been any decisions by Swiss courts on the application of the collective dominance concept. Likewise, there are no complaints pending that would be dealing with this question at the moment.

- *Do such co-ordinated effects include more than would be actionable under your law as prohibited anticompetitive agreements or abuse of dominance/monopolisation? If so, please identify the extra effects reached.*

i) Collective dominance and anticompetitive agreements

Again a remark to terminology: In the Swiss Cartel Act there is no notion of "anticompetitive agreement". Article 4 (1) Acart defines the term "agreement affecting competition"; in Art. 5 Acart it is further defined which agreements affecting competition are deemed unlawful. In what follows we will discuss whether a situation of collective dominance goes beyond what is defined as an agreement affecting competition. Because it can then be assumed that such an agreement would be unlawful, we also use the term "anticompetitive agreement".

So far, the concept of collective dominance has only been applied in merger control. The Commission has therefore not yet had to clarify if collective dominance goes past what is defined as an agreement affecting competition.

According to Art. 4 (1) Acart 'agreements affecting competition' are binding or non-binding agreements and concerted practices between enterprises operating at the same or at different levels of the market with the purpose or effect to restrain competition. This can take the form of explicit or implicit (tacit) collusion. However the commentary (called "message") by the Federal Council with regard to the Act on Cartels makes clear that spontaneous parallel behaviour resulting from a certain market structure (oligopolistic), may not be regarded as an agreement affecting competition because of a lack of conscious and deliberate co-operation (see "Bundesblatt" (BBI) 1995 I 545).

In markets with oligopolistic structures, suppliers are conscious of their mutual dependencies. An oligopolist will therefore adapt his strategy to the probable strategies of his competitors. If this results in parallel behaviour as being the dominant strategy, a conscious and deliberate co-operation has to be denied. This situation therefore could not be defined as an agreement affecting competition – nevertheless it would be a situation of collective dominance. In this sense, the concept of collective dominance goes beyond what is defined as an agreement affecting competition[1]. However, as mentioned above, in Swiss competition policy practice, the distinction between anticompetitive agreements and collective dominance has yet to be clarified.

Collective market dominance in the sense of a "spontaneous parallel behaviour resulting from a certain market structure" doesn't imply that the participating firms are maximising their profits together. However, since these companies are well aware of their mutual dependencies, a tendency for conscious and deliberate co-operation may exist under certain circumstances (see below b). Such a case could then clearly be defined as an agreement affecting competition.

ii) Collective dominance and abuse of (collective) dominance/monopolisation

In Swiss competition policy practice, there have not been any cases involving abuses of collectively dominant firms. The Act on Cartels would, however, cover the matter, since it defines the term "enterprises having a dominant position in the market" as one or more enterprises being able to, as regards supply or demand, behave in a substantially independent manner with regard to the other participants in the market (Article 4 (2) Acart). In this respect the concept of collective dominance does therefore not go past what is explicitly regulated by the present legal framework.

b. What are the structural and behavioural factors that your agency considers to be especially pertinent in analysing the probability that a merger will produce anticompetitive co-ordinated effects? Which of those are the most important? Why?

- *What are the structural and behavioural factors that your agency considers to be especially pertinent in analysing the probability that a merger will produce anticompetitive co-ordinated effects?*

The present Act on Cartels entered into force on July 1st 1996. It was only then that merger control was introduced into Swiss competition policy. The case law is therefore very recent and only includes the three decisions already mentioned.

These decisions, in consequence, rely to a large extent on the experiences of foreign agencies, in particular the EU's competition authority[2] and the Bundeskartellamt in Germany[3].

The case practice of the Swiss Competition Commission can be summarised as follows: the Commission examines if there are incentives for collusionary behaviour, and if such a behaviour is likely to be stable (or 'sustainable').

Stability implies the absence of better strategies by the companies involved. If collective dominance derives from parallel behaviour that is based on 'best' individual strategies, it can be considered stable, since any deviation would by definition not constitute a 'best' strategy (it would then be a 'dominated strategy' in game theoretic terms). If collective dominance goes past such 'natural parallel behaviour', which should not be excluded, because the oligopolists will be aware of the fact that by consciously and deliberately co-ordinating their behaviour they could further raise their profits, it will be necessary to make sure that no oligopolist deviates from the 'co-ordinated' strategy ("Maintaining the cartel price and output quotas is a public good, and cheating results in private gain"[4]).

Because demand and cost functions are extremely hard to determine in practice (lack of relevant data, problems related to registration and evaluation), it is difficult to distinguish (explicit or implicit) collusion from 'natural parallel behaviour' resulting from individual 'best' strategies. This distinction may be less problematic in merger control. The Commission may prohibit the concentration or authorise it, subject to conditions or obligations if it transpires from the investigation that the concentration would create or strengthen a dominant position liable to eliminate effective competition (Article 10 (2 a) Acart). It is not relevant if the elimination of effective competition would be caused by collective dominance resulting from collusion or resulting from 'natural parallel behaviour'. The situation is different when examining agreements affecting competition, since 'natural parallel behaviour' does not constitute such an agreement (as explained above a).

For the following, let us leave the question of distinction aside and focus on the indicators for collective dominance which have been applied by the Swiss Competition Commission in its former analyses.

No matter what a situation of collective dominance is based upon, the participating entities may anticipate the benefits of their concerted strategies with a sufficient probability only when market conditions are stable ("Tacit collusion is likely to occur only in certain types of markets such as geographically segmented markets or markets with no rapid growth or slow technical progress"[5]).

The stability of market conditions, in turn, depends strongly on the market phase and on market entry barriers. Dynamic markets that are characterised by frequent product and process innovations as well

as a strong potential for market entry by new competitors seriously handicap the participants' abilities to foresee the future competition conditions.

The (tacit) fixation of prices (and/or other competition parameters) will be very difficult and therefore rather unlikely, if a large number of firms have to be included in the collusion and/or if the parties' background differ strongly. In the latter case the parties will have diverging interests. In such an environment (many competitors, differing interests) also "natural parallel behaviour" will not be very probable. Further important criteria to be considered are therefore the number of oligopolists that would potentially participate in the collusion or engage in "natural parallel behaviour" and the symmetry of interests.

For analytic purposes, these criteria are to be further divided into subgroups:

For instance, in order to appreciate the criteria "number of oligopolists that potentially participate in the collusion or engage in natural parallel behaviour", not only the absolute number, but also possible entanglements between the potential participants (question of market transparency, see below) will have to be determined. Also, it will be important to find out if collusions between these enterprises have occurred in the past, how many 'outsiders' to the present collusion there will be and how strong their position is. It is evident that the combined market share of the potential participants of a collusion will have to be high in order to ensure a position of collective dominance with an influence on competition parameters (price, quantities, quality). Market concentration will therefore be rather high.

In the context of "symmetry of interests", the following sub-criteria will have to be analysed: Cost symmetries (are cost structures of potential participants similar?), product symmetries (are products homogeneous or differentiated?), as well as common economic planning (assessment of future profits, i.e. discount rates) and common corporate philosophies may facilitate collective dominance. Product differentiation (or product asymmetries) may also allow for market segmentation by regions or customers[6]. It reduces the possibilities of other oligopolists 'gaining ground' in these segmented markets.

The fixation of corporate strategies in relation to the possible strategies of the competitors requires a vast amount of information. Another important prerequisite for collective dominance is therefore a high degree of market transparency.

In the case of collective dominance based on explicit or tacit collusion, the participating entities will further normally want to ensure that all the parties respect the agreement ("No conspiracy can neglect the problem of enforcement"[7]). The participating enterprises must therefore be able to monitor their partners and to sanction possible deviations from the agreement. The sanction may just consist in the dissolution of the agreement with the effect that everybody is worse off. In the context of a collusion, therefore, a 'sanction' consists in the switching from parallel behaviour to individual competitive strategies. The enterprises increase the credibility of such measures by creating and maintaining overcapacities, thereby signalling their ability to 'disrupt the balance'. Since "the basic method of detection of a price cutter must be the fact that he is getting business he would otherwise not obtain"[8], the central criteria for monitoring is again market transparency. The degree of market transparency may be determined by analysing *inter alia*: association meetings, institutions for the pre-announcement of price increases, transparency-increasing vertical restraints (meeting competition clauses, resale price maintenance, etc.).

The hypothesis that a deviation from the collusion is profitable for a single participating enterprise, provided that it is not discovered and sanctioned, is certainly valid. However, the incentives to deviate (or to 'cheat') may differ. In this respect, a first and final deviation will not increase profit by much if the transaction value is small. If, in order to be profitable, deviation must be repeated, the risk of detection increases[9]. Therefore, the probability of collective dominance also depends of the position of the

(potential) trading partners. Not only do strong trading partners increase profit opportunities and thereby the incentives to 'cheat', but they will also tend to disturb any attempted collusion. The incentive to deviate from collusion is likely to be reduced in the case of strong product differentiation and therefore – as a tendency - low price elasticity of individual firm demand, since additional market shares can only be obtained through considerable price reductions.

For the sake of a better overview let us summarise the criteria for collective dominance that were mentioned so far:

- Stability of market conditions:
    - market phase;
    - market entry barriers.
- Number of competitors (market concentration)
- Interest symmetry:
    - cost symmetry;
    - product symmetry;
    - symmetry of economic planning and corporate philosophies.
- Market transparency:

Additionally, in the context of collective dominance based on collusion:

- Sanction possibilities (potential of threat)
- "Cheating"-incentives for single participants
    - price elasticity of the individual firm demand;
    - position of trading partners.
- *Which of those are the most important? Why?*

A graduation of these criteria according to their importance has not been undertaken so far. However, the 'proof' of collective dominance will certainly be easier if all the elements confirm it on principle. One (or several) criteria may particularly point towards the creation or strengthening of collective dominance and may thereby "compensate" a less clear assertion stemming from another criterion. The creation or strengthening of collective dominance may, however, be excluded on the basis of single elements. For instance, if the market is particularly dynamic, or if the number of necessary partners for a collusion is too large, or if the market is very non-transparent.

c. Some countries prohibit mergers which have the effect of creating or strengthening a dominant position ('dominance test') while others have opted for a substantial lessening of competition ('SLC') standard. Still others apply both tests and at least one has alternated between the standards. It is also worth noting that many if not all countries employing a dominance test have widened its scope by defining 'dominance' to include joint or collective dominance.

- *What are your agency's views as to the relative merits of the dominance and SLC standards in relation to the power to block mergers predicted to produce unacceptable anticompetitive co-ordinated effects?*

Art. 31 bis (3 d) of the Swiss Constitution empowers the Confederation to enact regulations against economically or socially harmful effects of cartels and similar organisations. It is evident that both the dominance and the SLC tests have to go with the Constitution principles. Therefore, as soon as such harmful effects are present, both tests will have to come to the same results. In our view, therefore, there should not be any difference between these tests with regard to the analytical requirements and the final results.

By contrast, it is very possible that in jurisdictions, where the SLC-test is applied, and in jurisdictions applying the dominance test, there exist diverging opinions about the circumstances when one has to expect economically or socially harmful effects of a situation of collective dominance. This question cannot really be answered here. However, it can be said that the legislator in Switzerland deliberately chose a so-called qualified dominance approach. To trigger an intervention by the competition authorities, a merger not only has to create or strengthen a dominant position – be it by unilateral or co-ordinated effect – but this also has to be liable to eliminate effective competition. The legislator made it therefore quite clear that an intervention by the competition authorities should rather be the exception. For this reason it may be supposed that – in the opinion of the legislator – an SLC approach would have left too much room for interventions by the competition authorities.

- *If not already addressed under issue 2, supra, and if your merger review process employs the joint/collective dominance concept, what factors and analysis are appealed to in order to demonstrate that a group of firms is jointly/collectively dominant?*

See above b.

NOTES

1. For a similar reasoning see GUGLER, Philippe "Main Indicators of Collective Dominance in the Context of Preventive Control of Concentrations", *International Business Law Journal, No 8, 1998*, pp. 92.

2. See BRIONES, Juan “Oligopolistic dominance, is there a common approach in different juridictions?”, *European Coimpetiton Law Rewiev Vol. 16, 1995*; KANTZENBACH, Erhard “Kollektive Marktbeherrschung: Neue Industrieökonomik und Erfahrungen aus der Europäischen Fusionskontrolle”, Baden-Baden 1996; and PHLIPS, Louis “Competition policy: a game-theoretic perspective”, *Cambridge University Press*, Cambridge, 1995.

3. See Bundeskartellamt “Marktbeherrschung in der Fusionskontrolle: Checkliste des Bundeskartellamtes”, *FIW-Dokumentation, Heft 15*, Köln 1990, pp. 24.

4 . O'DRISCOLL, Gerald P. Jr. “Competition as a process: a law and economics perspective”, in LANGLOIS, Richard N. “*Economics as a process. Essays in the New Institutional Economics”*, Cambridge, p. 158).

5. PHLIPS, op. cit., p. 97.

6. KANZENBACH op. cit., p. 19 speaks in this context of “market barrier collusion”.

7. STIGLER, George J. "The Organization of Industry", Chicago 1968, p. 42, originally in “Journal of Political Economy”, LXXII, No 1, 1964.

8. STIGLER op. cit., p. 44.

9. See STIGLER op. cit., p. 43.

UNITED KINGDOM

The UK has recently introduced a new competition law - the Competition Act 1998 ('CA98'). The main effect is to introduce prohibitions of anti-competitive agreements (under Chapter I) and abuse of a dominant position (under Chapter II). Chapter I and Chapter II are based closely on Articles 85 and 86 of the Treaty of Rome and under Section 60 there is a duty for the competition assessment to have regard for EC precedent and practice. Mergers will continue to be examined under the Fair Trading Act 1973 ('FTA').

Hitherto the UK law has allowed a flexible case-by-case approach to competition analysis with a wide 'public interest' test. In contrast to the Treaty of Rome, where examination of collusion or parallel behaviour in oligopolistic markets has sometimes been hindered by the need to identify 'structural links' between the parties, the UK has been able to examine whole industries under the complex (or scale) monopoly provision of the FTA. Jurisdiction can be established relatively easily where firms that have a common course of conduct, together have more than 25 percent of a 'market' - defined by some reasonable description of supply. The complex monopoly provisions of the FTA has been retained to allow the examination of oligopolistic markets. In 1999, complex monopoly references of cars, and supermarkets, were made to the Competition Commission (which since 1 April 1999 has replaced the MMC which it now incorporates). Structural and behavioural remedies are available.

The UK therefore continues to have the opportunity to examine ('ex-post') oligopolistic markets and firm behaviour, and the scope to bring in structural and behavioural remedies. Nevertheless, it is arguable that it is better to prevent the development of oligopolistic market structures if possible, since the identification and remedying of competition dampening behaviour ex-post has proved difficult. This places greater importance on the opportunity for ('ex-ante') action when proposed mergers are examined. Simply, mergers (other than those that qualify under the ECMR) are examined initially by the OFT ('Stage I') and, if a potentially significant detriment to competition is identified, referred to the Competition Commission for fuller examination ('Stage II'), with a final report to the Minister for Trade and Industry.

The UK approach (as demonstrated by the OFT and MMC Reports) to merger analysis remains on a case-by-case basis. It is not bound by precedent nor is it based on published guidelines. The lack of published guidelines is partly because merger analysis is carried out by two independent institutions (the OFT and the Competition Commission). By contrast, the Competition Act 1998 which will be implemented by the Director General OFT, is to be accompanied by three economic guidelines covering all aspects of competition assessment (Market Definition, Assessment of Market Power, Assessment of individual agreements and conduct).

Given the importance of taking action to prevent the development or concentration of oligopolistic market structures that might facilitate tacit or actual collusion, the OFT commissioned a report on 'Merger Appraisal in Oligopolistic Markets' from the consultants, NERA. The report, which is close to publication, will be available as a room document for the round table. A copy of the executive summary of NERA's report is attached to this document.

The remainder of this paper provides cover for that report. It summarises the approach, contents and conclusions of the report and provides a brief critical appraisal and some extensions to the work.

1. Aim of the report

The aim of this research project was to provide an overview of the theory of oligopolistic markets, to review that theory against a set of case studies, and to draw some policy conclusions relevant to the OFT's task in assessing mergers. The research considered both unilateral and co-ordinated effects. It was however restricted to the consideration of horizontal mergers.

2. Methodology

The report begins with a brief description of the issues raised by horizontal mergers (chapter 2), followed by an overview of the various and diverse models of oligopoly theory (chapter 3). Many of these models are not specifically set up for the assessment of mergers. The report therefore attempts to draw out some of the predictions of these models when there is an increase in concentration in the industry (chapter 4).

The main section of the report is a retrospective examination of 11 UK merger investigations in oligopolistic markets, all of which were ultimately cleared by the competition authorities (chapter 5). The idea behind this study was to look at how competition was affected, if at all, by the increases in market concentration. The examination therefore provides an indication of the usefulness of oligopoly theory in the practical examination of mergers. The lessons from this investigation are set out in chapter 6.

3. Conclusions of report

The report concludes that oligopoly theory does indeed have a useful role to play in the investigation of mergers. Correctly applied, oligopoly theory can be useful at identifying the factors which need to be considered in the assessment of a merger e.g. sunk costs, the nature of the product, and the relative efficiencies of firms. However, the report warns that oligopoly theory is of limited use in predicting how a market is likely to behave following a merger. This is in part due to the vast number of competing models and the sensitivity of these models to small changes in assumptions. However, it is also because the structure of the oligopoly, and indeed the nature of competition, is often endogenous and likely to evolve over time.

The report also finds that buyer power is a very important factor in determining the nature of competition in an oligopoly. Buyer power is often neglected in oligopoly models, the standard assumption being that firms sell to individual consumers or, equivalently, a perfectly competitive downstream market. However, the authors find that in most of the case studies where buyer power was present, price competition was strong, either because the buyer was able to play one supplier off against another, or because the they had used their power to affect the market structure (i.e. encouraging entry or integrating backwards). Notably, the only oligopoly where competition did not appear to be effective post-merger was one where no buyer power was present.

Much of the report focuses on the importance of unilateral effects in merger assessment, particular in differentiated products markets. The report does however draw conclusions from the case studies and economic theory on the factors which are most likely to facilitate collusion as the market structure becomes more concentrated. Many of these factors are familiar ones such as product and cost homogeneity, price transparency and stability of demand. The report however also highlights the importance of "maverick" firms and buyer power in undermining collusion.

4. Points for further consideration

- Is it possible to construct a checklist of factors likely to cause co-ordinated effects, when economic theory often points in opposite directions?
- Are co-ordinated effects possible in heterogeneous as well as homogeneous goods markets?
- Are there factors other than collusion which can give rise to co-ordinated effects? In particular, if a merger has the effect of increasing barriers to entry, should this be considered as a co-ordinated effect?
- Are co-ordinated effects more likely where oligopolists are vertically integrated, or where there are oligopolies both upstream and downstream?
- To what extent can entry be relied upon to diminish concerns relating to co-ordinated effects?

Annex

EXECUTIVE SUMMARY OF "MERGER APPRAISAL IN OLIGOPOLISTIC MARKETS: A REPORT FOR THE OFFICE OF FAIR TRADING PREPARED BY NERA" (OCTOBER 1998)

This report contains the results of a research project commissioned from NERA by the Office of Fair Trading. The project specification was to provide an overview of the theory of oligopolistic markets, to review that theory against a set of case studies, and to draw some policy conclusions relevant to the OFT's task in assessing mergers .

Mergers can be horizontal, vertical or diversifying. As horizontal mergers are between directly competing firms, they most often threaten the maintenance of effective competition. Horizontal mergers can raise fears of unilateral effects, co-ordinated effects and exclusionary behaviour.

Unilateral Effects

Unilateral effects arise when two closely competing products are brought under common ownership. The term unilateral effect refers to the fact that the post-merger firm has an incentive to raise price even if the merger has no effect on the behaviour of competing firms. The price of both products is likely to rise because sales which would have previously been lost to the acquiring firm are partially recaptured in higher sales of the acquired product. The greater the propensity of customers of the acquirer to switch to the acquired products, the greater will be these unilateral effects.

In markets in which products are differentiated either by virtue of their innate characteristics or by strong branding, market shares can provide an unreliable guide to the possible extent of any unilateral effects. In cases such as this it is often more informative to directly assess the proportion of each of the merging firms' customers who would have switched to the other merging firms' products following a price rise ("diversion ratios"). This information can be used to generate an initial estimate of the size of any unilateral price increases following the merger. A variety of techniques exists for estimating these price rises, ranging from the relatively simple where data are poor to the highly complex where good data exist.

However, even if the diversion ratios or post-merger concentration indices give cause for initial concern about the unilateral effects of a merger, there are many other factors which must be considered in an appraisal of the merger's overall effect on economic welfare. First, in differentiated product markets in which the fear is that unilateral price increases may be imposed by the merged firm, it is possible that existing products could be repositioned to compete more closely with the products of the merged firms, either through a change in brand image or through changes to their physical characteristics.

There are also factors which might mitigate concerns over unilateral effects. Concerns will be less in a market in which entry does not require the expenditure of significant sunk costs, where entry can be undertaken quickly and where entry can be successful on a scale which is small relative to the overall market. Concerns would also be lessened by the existence of large and sophisticated buyers, and by rapid product innovation and development.

In addition the benefits of the merger must be considered. Mergers might create benefits if the merged firm has lower costs due to the greater exploitation of economies of scale, including the rationalisation of overheads, or increased buyer power which reduces input prices.

Co-ordinated Effects

In markets in which products are undifferentiated, market shares are much more likely to give a reasonable indication of the possible extent of post-merger price increases. In homogeneous product markets the most important concern may not be that the merged firm will engage in unilateral price rises, but that the entire market will become tacitly or explicitly collusive after the merger. Post-merger effects that rely on the behaviour of the merged firm's rivals are termed co-ordinated effects.

Market shares and the extent of post-merger concentration are highly relevant to an assessment of the risk of greater post-merger collusion. Concentrated markets are more amenable to collusion because the profitability of competing on the fringe of a tacit or explicit cartel rises as the number of firms in the market rises. Concentration also aids the effective policing of cartels by making cheating easier to detect. This in turn may make a cartel more likely or an existing cartel more stable at higher prices.

In mergers raising fears of greater collusive activity, other characteristics of the market will often make collusion impractical even at the higher levels of concentration created by the merger. Since collusion is most successful in stable, predictable and transparent markets, such confounding factors might include a lack of transparency in pricing, a high degree of customisation, widely differing cost bases between suppliers, differing degrees of vertical integration and rapidly expanding or volatile demand. The fact that firms have an incentive to adopt co-operative behaviour does not mean that they will find the mechanisms to adopt anti-competitive market outcomes. Entry threats and efficiency benefits can also affect co-ordinated effects concerns.

Exclusionary Effects

The concerns over the potentially exclusionary effects of mergers are less well developed than those regarding unilateral and co-ordinated effects. Often, concerns over exclusionary effects will have been raised by competitors to merging firms. However, testimony from competitors should be subject to the same critical scrutiny as that of the merging parties, since competitors will often benefit from an anti-competitive merger and suffer from an efficiency-enhancing one. Since in many cases the interests of competitors are likely to be diametrically opposed to those of economic welfare generally, competitors' complaints about the exclusionary effect of mergers need to be particularly carefully examined. Where mergers raise legitimate concerns over exclusionary practices it will often be because the merger has had unilateral effects, reducing the competitive constraints under which the merged firm must operate.

Case Study Analysis

The case studies illustrated some of the themes from the theoretical discussion, and also served to underline the importance of analysing mergers in a dynamic market context. Of the eleven cases which were revisited, in most the decision to clear the merger was found to have been the correct one. In only two cases have subsequent events called into question the wisdom of clearing the mergers, though in both these cases further analysis would be needed to reach a definitive conclusion.

In general, the phenomenon of buyer power was found to have had an especially strong influence on post-merger events. Very often the post-merger structure of the industries which were looked at was more significantly shaped by the decisions of buyers than of the merging parties. For example, of particular importance to the shaping of the markets was buyers' decisions about where to source, from whom to source, whether to encourage new entry and, in the case of retailers, of how much space to devote to different products and whether to launch or promote own-label in competition with brands. In several of

the cases, including some of those with the highest post-merger shares, buyer power resulted in prices falling after the merger.

In short, the case studies provide a reminder that mergers do not take place in a vacuum. The dynamic responses that take place after mergers underline the fact that post-merger predictions based purely on clues from demand-side relationships tell only part of the story. Thus, although models of unilateral effects provide useful insights into possible danger areas, they must be supplemented by an attempt to assess how the market may respond to structural changes caused by mergers.

Nevertheless, the case study merger which caused the greatest concerns of reduced competition was in a differentiated product market and illustrates the potential usefulness of oligopoly models based on unilateral effect theories. In that case, whilst several makers of the products concerned existed, the merging companies were the two major producers of one particular class of the product. By eliminating competition between these two directly competing manufacturers, the merger appears to have reduced competition and may have allowed a price increase which would not have been profitable pre-merger. Crucially, in this case, the fragmented nature of demand and the constraints under which buyers operated prevented the kind of supply-side response to the merger that we saw in several of the other case studies. As a result, the market appeared not to have exhibited any resistance to the post-merger price increases that had occurred.

A Framework for Analysis of Mergers

Drawing on recent developments in economic literature and the lessons of the case studies, we suggest a practical framework for merger appraisal. We recommend that the merger control authority should identify at the outset whether the main concern with the merger is likely to be unilateral or co-ordinated effects. These concerns raise rather different issues and so demand rather different frameworks of analysis.

With unilateral effects, market shares and market definition may be less relevant than a direct assessment of the competitive proximity of the merging firms' products to each other. If sufficient data is available, it may be possible to estimate directly the initial unilateral effects of the merger on prices without having to make too many restrictive assumptions about the structure of demand. Supply-side responses, such as new entry, perhaps with the encouragement of large buyers, and the possibility product repositioning should also be considered.

In the case of co-ordinated effects, conventional market shares may provide a reasonable preliminary indication of the competitive position in the market. Further investigation should then focus on the extent of product homogeneity, the degree of symmetry between the firms in terms of their sizes and cost structures and the level of transparency in the pricing and output decisions of the firms involved. Entry conditions are also relevant.

In all cases, the lesson from our case studies is that mergers should be seen in a dynamic context and that consideration is given to how the market would have developed in the absence of the merger. In extreme cases it may be that one of the firms would have exited the market. More generally, trends in the market need to be considered as it is these changes which may have prompted the merger and which may give an indication of the potential benefits which the merger may bring. These benefits must be weighed against any perceived risk of lessened competition.

The predictions of oligopoly models are highly sensitive to the assumptions underlying them. It would therefore be dangerous to take a single model of oligopoly behaviour and attempt to draw generalised policy conclusions from it. In the practical evaluation of mergers a range of factors must be

considered and weighed by the investigating authority without dogmatic reliance on a single theoretical perspective. Nonetheless, oligopoly theory, despite its diversity, can focus the inquiry on the likely nature of the concerns which a merger might raise and help the investigator to identify those factors which should be considered when coming to a view on the likely outcome of a merger.

UNITED STATES

1. Introduction and Background

Since the passage of the Sherman Act in 1890 the United States has sought to minimize the welfare-reducing effects of oligopoly behavior. While early enforcement efforts under the Act focused on eradicating the formal cartels that were commonplace in American industry in the late 19th and early 20th centuries, enforcement officials have devoted considerable resources during the past 50 years toward uncovering and eliminating more covert forms of anticompetitive coordination (both express and tacit) as well as toward analyzing the potential effects of mergers in concentrated industries. The passage of the Federal Trade Commission and Clayton Acts in 1914 added significant dimensions to the enforcement scheme.

Today, these three statutes (the Sherman, Clayton and FTC Acts) provide the basis for US antitrust enforcement against oligopoly behavior. Section 1 of the Sherman Act prohibits agreements that restrain trade, and thus can be used to attack active collusion, whether tacit or express.[1] Section 2 of the Sherman Act prevents, among other things, conspiracies to monopolize. Section 7 of the Clayton Act forbids mergers or acquisitions that, among other things, substantially increase the risk of anticompetitive coordination. Finally, section 5 of the FTC Act prohibits unfair methods of competition. Together, these statutes provide a comprehensive set of tools for dealing with the oligopoly problem.

1.1 The Oligopoly Problem

Whenever firms in a market are able to coordinate pricing and production activities, they can increase their collective profits and reduce consumer welfare by raising price and reducing output.[2] The more likely participating firms are to succeed in such an endeavor, the greater their incentive to attempt it. In oligopolistic markets the success of each firm's actions will depend, in part, on the direct responses of its rivals. Economic theory generally assumes that firms in an oligopoly recognize or perceive these interdependencies, leading to the potential for strategic coordination.

However, it is far from inevitable that oligopolists will price supracompetitively. While a collective incentive motivates collusion, strong private incentives will motivate firms to deviate from any coordinated scheme. Often an individual firm will find it profitable to undercut cooperative terms in order to expand its own sales. Faced with this scenario, the firm may well opt to deviate from, or "cheat" on, the collusive arrangement. This temptation to cheat is compounded by the realization that other participating firms may have similar incentives. If a firm holds to the collusive price while its rivals cheat, it will be substantially worse off than had it priced non-cooperatively.[3] Economists refer to this phenomenon as the "cartel problem" or "prisoners' dilemma."[4] It demonstrates that collusion is not inherently self-enforcing. Where the prospect of cheating is sufficiently strong, it will outweigh the incentive to cooperate in the first instance.

In a landmark article published in 1964, University of Chicago professor George Stigler demonstrated that firms seeking to collude, whether expressly or tacitly, must first be able to overcome the market uncertainties that give rise to the cartel problem.[5] Thus, they must be able to identify terms of

coordination, detect deviation from those terms by individual participants, and punish deviators. This requires that cartel members have access to timely and reliable information about the behavior of all participants. Indeed, the quality of information available to a cartel is the most important factor affecting its viability (*i.e.*, ability to overcome members' incentives to cheat) and strength (*i.e.*, ability to realize the full extent of members' collective market power).[6]

Collusion also may attract entry in response to profit opportunities. The colluding firms must either forestall entry, or convince entrants to abide by the cartel's output restrictions.

Firms' choices of *how* to collude will depend both on the anticipated severity of the cartel problem, and on the risk of antitrust scrutiny associated with different methods of collusion. This presents an *inherent tension*: effective maintenance of a cartel requires transparency of participants' actions, while effective shielding of actions from antitrust authorities requires opaqueness. Colluding firms must balance these two goals.

1.2 Collusion is More Than Oligopoly Pricing

Collusive schemes often take an informal structure, arising from a common understanding among competitors that falls short of an express contract. Such schemes need not necessarily be communicated directly among the participants, but may be tacit. However, the legal analysis of collusion relies on the existence of at least some form of actual agreement among the participants, *i.e.*, some concerted action that amounts to a "contract, combination or conspiracy" under traditional legal principles. Thus collusion, in the legal sense, is distinct from mere interdependent oligopoly behavior.

As noted above, oligopolists sell in a market with "perceived interdependencies." Each firm selects its profit-maximizing price based in part on the reaction it expects from rivals. This interdependence among sellers can, in certain circumstances, result in supracompetitive prices and reduced output even in the absence of an illegal agreement. The "interdependence theory" of oligopoly pricing can be summarized as follows:

In a competitive market with many sellers, the individual firm is too small to affect market price. It is generally unable to sell at a price above the market level and the effect of any decision by it to reduce its price will be too small to evoke significant reaction from competitors. By contrast, in an oligopoly a seller who substantially cuts price and expands output will have a direct, perceptible effect on the output of the remaining firms. Anticipating that its competitors will react to such a price reduction by matching it (thus nullifying the gains from employing such a strategy), the oligopolist is less likely to initiate a price cut in the first place. In short, oligopolists base pricing decisions in part on the anticipated responses of their rivals. As a result, vigorous price competition is avoided. This effect may be achieved without any illegal agreement among sellers.[7]

Professor Stigler's analysis initially led some scholars to reject the interdependence theory of oligopoly behavior. These scholars recognized that interdependent pricing is nonetheless "coordinated," in that it requires the identification of, and continued adherence to, a supracompetitive price by multiple firms. Moreover, as with other forms of coordination, private incentives to deviate from the interdependent price must still be overcome by a credible threat that competitors will monitor deviation and react to (or punish) it by reducing their prices to competitive levels.[8] Thus, interdependent pricing has been called merely a "special case in the general economic theory of collusive pricing."[9] In the absence of some mechanism by which to monitor and punish deviation, it was believed that the incentives to cheat identified by Stigler would typically overwhelm the potential for coordination.

Building upon professor Stigler's early analysis, modern economic theorists recognize that where firms interact with one another repeatedly over time incentives may change such that the interdependencies among them can lead to supracompetitive pricing even in the absence of an illegal agreement.[10] However, they also note that the ultimate success of any form of coordination (whether the result of concerted action or not) will often require the adoption of "facilitating devices" that make it easier to detect and punish deviations from the coordinated terms.[11] Such facilitating devices may themselves be the subject of an agreement among the participants, but need not necessarily be so.

2. US Antitrust Laws as a System to Avert Consumer Welfare Loss

The US antitrust laws combat anticompetitive oligopoly behavior in three basic ways. The Sherman Act prohibits horizontal agreements among competitors that restrain trade unreasonably. Section 7 of the Clayton Act prevents mergers or acquisitions whose effect may be to create or strengthen oligopoly structures in markets that are conducive to coordination. And section 5 of the FTC Act prohibits practices that tend to facilitate collusion. Combined, these laws provide a unified approach to dealing with the oligopoly problem.

It is important to note that US law does not proscribe supracompetitive oligopoly pricing in the absence of an agreement (*i.e.*, concerted action) among sellers. Treating such behavior as illegal would demand that competitors act irrationally by ignoring their perceived interdependencies, *i.e.*, that rivals should price as if they were in a perfectly competitive market.[12] It would also mandate unworkable remedies. The root source of the supra-competitive pricing is the oligopoly structure rather than firms' rational behavior. The only potential remedies would be direct price regulation or a structural deconcentration policy. Both remedies impose costs. Price regulation substitutes the regulator's judgment for the mechanisms of the free market, inevitably leading to inefficient outcomes. As a remedy for supracompetitive oligopoly pricing in the absence of an agreement, structural deconcentration is undesirable because it imposes substantial costs on society, including those from the loss in efficiencies created by economies of scale and scope, the expenses of litigation incurred to force the dissolution of large enterprises, and the disruption of economic activities in the deconcentrated industry.[13] In addition, deconcentration creates explicit disincentives for moderate and larger firms to continue to invest and expand, for fear of triggering antitrust scrutiny simply by dint of their size.

As a result, US courts and enforcement officials are often faced with the difficult task of determining when "coordinated" pricing is the result of an actionable agreement and when it results from mere interdependent behavior.

2.1 Analysis of Tacit Collusion Under Section 1 of the Sherman Act

Section 1 of the Sherman Act, 15 USC. §1, prohibits "contract[s], combination[s] . . . or conspirac[ies]," that unreasonably restrain trade. A plaintiff in a section 1 action[14] must establish the existence of an agreement between two or more parties from which unreasonable anticompetitive effects result. Naked horizontal agreements to fix prices, restrict output, or allocate customers or markets have long been deemed to be *per se* illegal under the Act.[15] Other agreements are judged by a "rule of reason," under which their anticompetitive effects are weighed against any procompetitive benefits for which the agreements are reasonably necessary.[16]

Section 1 collusion cases typically involve one of five scenarios: 1) defendants have allegedly entered into express collusive agreements on price or output about which direct evidence is available; 2) defendants have allegedly entered into express (but covert) agreements about which no direct evidence is available; 3) defendants have allegedly entered into tacit agreements about which only circumstantial

evidence is available;[17] 4) defendants have coordinated their actions simply by observing and anticipating the conduct of their rivals;[18] or 5) defendants have allegedly agreed to adopt concerted practices that facilitate anticompetitive coordination.

In the first scenario, prosecution is relatively straightforward. Direct evidence, usually in the form of documents and/or testimony, proves that competitors agreed to eliminate competition in some meaningful sense, and the case becomes largely a matter of establishing appropriate relief and/or imposing appropriate punishment. The remaining scenarios present more difficult problems of analysis and proof. In each, the plaintiff must establish that an actionable agreement exists. While scenarios 2, 3 and 5 above can pose difficult issues of proof, the fourth is likely to be unactionable as a matter of law.

Courts recognize that "[o]nly rarely will there be direct evidence of an express agreement,"[19] and are willing to infer actionable collusion under section 1 from circumstantial evidence that the defendants arrived at and implemented some form of tacit understanding.[20] However, more than mere "conscious parallelism" or "interdependent behavior" must be established before an agreement will be inferred.[21] Plaintiffs must also be able to provide evidence that "'tends to exclude the possibility' that the alleged conspirators acted independently. . . . [I]n other words, [plaintiffs] must show that the inference of conspiracy is reasonable in light of the competing inferences of independent action or collusive action that could not have harmed [plaintiffs.]"[22]

Typically, to infer an agreement, plaintiffs must prove the existence of parallel conduct along with certain "plus factors" which tend to show that the conduct was the product of an anticompetitive scheme. The cases usually frame the question as one of whether the plaintiff provided sufficient evidence to allow a reasonable jury to infer an agreement. Traditional plus factors include evidence that defendants' actions were against their unilateral self-interest, proof of direct communication between rivals, evidence of opportunities to collude, evidence of anticompetitive intent on the part of the defendants, and lack of a legitimate business justification for defendants' practices.[23]

In part because of the inherent difficulties associated with circumstantial evidence, tacit collusion can be extremely difficult to prove.[24] Although there is no absolute hierarchy of evidence for collusion cases, some generalizations can be made about the persuasiveness of traditional plus factors.[25] In addition to evidence of parallel conduct, direct evidence of a conspiracy (both documents and testimony) will generally be most persuasive. This evidence can conclusively establish the existence of an agreement. Evidence of practices by the defendants (such as information exchanges) that facilitate collusion can also be effective, particularly where the practices in question serve no important legitimate business purpose. Indirect evidence that tends to prove that each defendant's conduct would not be in its own individual self-interest in the absence of an agreement can also be persuasive. Courts sometimes refer to this as evidence that the defendant's conduct lacked independent business justification. Next is evidence that the defendants' stated reasons for their conduct were merely pretextual. Finally, and least persuasive, is evidence that the defendants were exposed to opportunities to collude.

In the wake of the US Supreme Court's admonition that inferences of horizontal conspiracies must make "economic sense,"[26] courts are also increasingly likely to turn to evidence bearing on the conduciveness of the relevant market to collusion. Facts which tend to demonstrate that the defendants would find it feasible and profitable to reach terms of coordination, monitor compliance with those terms, and punish deviation can help persuade a court to infer collusion, while facts tending to show that a coordinated scheme is not economically plausible under current market conditions will militate against such an inference.[27] Advances in economic analysis may also ultimately aid the determination of whether collusion has occurred.[28]

As noted above, agreements to engage in practices that "facilitate" anticompetitive coordination by reducing uncertainty or diminishing incentives to deviate from coordinated terms are also subject to challenge under section 1.[29] Typically, challenges occur when firms in a concentrated industry agree to exchange competitively sensitive information such as price data.[30] Such agreements are generally reviewed under the rule of reason, and their legality is determined by assessing whether plausible procompetitive business justifications exist for their use, and whether they are likely to result in substantial harm to competition.[31]

2.2 Analysis of "Conspiracies to Monopolize" Under Section 2 of the Sherman Act

Section 2 of the Sherman Act prohibits, *inter alia*, combinations or conspiracies "to monopolize any part of ... trade or commerce." 15 U.S.C. §2. To prove a section 2 conspiracy violation, the plaintiff must establish (1) the existence of a combination or conspiracy, (2) some overt act in furtherance of the conspiracy, and (3) specific intent to monopolize.[32] Although the elements of a section 2 conspiracy claim are distinct from those under section 1, similar analytical principles apply.

The most important aspect of section 2 conspiracy cases is typically the existence of an agreement to engage in objectionable conduct. As with section 1, the agreement may be established through either direct or circumstantial evidence.[33] Inferences of conspiracy under section 2 are governed by the same general principles applied in section 1 cases.[34] Indeed, collusion cases filed against oligopolists often contain counts alleging violations of both section 1 and section 2.

Although the performance of an overt act in furtherance of the conspiracy is a required element under section 2, the act need not be illegal in and of itself to meet the requirement. Rather, it can be any act in furtherance of the conspiracy.[35] In addition, the requirement that defendants possess a specific intent to monopolize can be proved by direct evidence of actual intent, or can be inferred from conduct.[36] However, a number of courts have refused to infer specific intent in the absence of a showing that defendants were engaged in anticompetitive exclusionary conduct having no legitimate business justification.[37] Commentators have argued that section 2 conspiracy claims are analytically redundant of section 1 claims.[38] While not all section 1 claims amount to a conspiracy to monopolize, every combination or conspiracy that offends section 2 can easily be held to be an unreasonable restraint of trade under section 1.[39] In *NYNEX Corp. v. Discon, Inc.*,[40] the Supreme Court appeared to affirm this reasoning, suggesting that unless a plaintiff could prevail on its section 1 claim it could not establish a conspiracy to monopolize.[41] Thus, as one commentator has noted, "[t]he Supreme Court's decision in *NYNEX* . . . may provide substantial guidance in reconciling Section 2 conspiracy law with cases decided under Section 1."[42]

2.3 Analysis of Coordinated Effects Mergers Under Section 7 of the Clayton Act

Section 7 of the Clayton Act, 15 U.S.C. §18, prohibits mergers or acquisitions "where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly." It has long been settled that the incipiency nature of section 7's language affords courts the ability to block acquisitions that substantially increase the risk of harm to competition, even before such harm has occurred.[43] Thus, section 7 "necessarily requires a prediction of the [challenged] merger's impact on competition, present and future,"[44] and "deals in probabilities, not certainties."[45]

The focus of section 7 inquiry is whether a proposed transaction creates an "appreciable danger"[46] of anticompetitive effects, regardless of whether those effects result from post-merger conduct that would be actionable under section 1 of the Sherman Act.[47] Accordingly, a merger that would

substantially enhance the ability of firms in the post-merger market to engage in oligopoly pricing, conduct that by itself is outside the scope of the Sherman Act, may be prohibited under section 7.[48]

In thinking about whether a proposed merger or acquisition creates a substantial risk of coordination, it may be helpful to understand how market characteristics can affect the likelihood and form of coordinated interaction. Imagine a continuum (depicted below) on which at one end market characteristics make coordination extremely difficult, and thus unlikely. On the other end, the market is perfectly conducive to coordination, such that firms could be expected to act interdependently.

Mkt. Perfectly Conducive to Coordination	Mkt. Somewhat Conducive to Coordination	Mkt. Somewhat Unfavorable to Coordination	Mkt. Highly Unfavorable to Coordination
I----------I		I----------I	
No Agreement Necessary/ Interdependent Behavior Expected	Some Agreement Necessary/Tacit Collusion Workable	Extensive Agreement Required/ Express Collusion Needed/Coordination Increasingly Unlikely	

In general, as markets become more concentrated, coordination becomes easier and thus more likely. A merger in a market that is already susceptible to coordination, or which makes a market substantially more susceptible, is likely to violate section 7.[49] However, concentration alone does not necessarily make a market conducive to coordination.[50] Whether a market is predisposed to such conduct depends upon the interaction of many factors affecting the ability and incentive of firms in the market to coordinate, detect deviations, and punish deviators.

Modern courts increasingly recognize that concentration is but one factor, albeit an important one, in a competitive effects analysis. Following the approach outlined in the federal government's 1992 Horizontal Merger Guidelines,[51] courts (and enforcement agencies) typically try to determine whether the post-merger market is one that is susceptible to coordination and/or whether the merger substantially increases the risk of such behavior. Accordingly, plaintiffs in a section 7 action must be prepared to articulate a sound coordinated effects theory and to support that theory with evidence. This requires a thorough analysis of market concentration, susceptibility of the market to coordination, and the likelihood of entry in response to oligopolistic conditions.

Persuasive evidence might include: a) evidence of an already oligopolistic market structure, including instances of interdependence or "less aggressive" competition; b) evidence of prior conduct or ongoing price-fixing or other collusive conduct; or c) evidence that the proposed acquisition would remove a substantial impediment to coordination, such as by eliminating a maverick firm.[52] Among these categories, evidence of prior or current coordination is potentially the most persuasive.

In sum, successful analysis (and pursuit) of coordinated effects merger cases will increasingly depend on the ability to integrate factual evidence with economic theory.

2.4 The Treatment of Facilitating Practices Under Section 5 of the FTC Act

Facilitating practices may be described as activities that tend to promote interdependent behavior among competitors by reducing their uncertainty as to each other's future actions, or diminishing their incentives to deviate from a coordinated strategy.[53] They tend to arise in oligopolistic markets that are

generally susceptible to collusion but in which the market participants face some obstacle.[54] For example, collusion may be frustrated by lack of public dissemination of price information on a regular and trustworthy basis or by significant differences in transportation costs among competitors. Wide use of advance announcements of price increases and a basing point freight system can eliminate the obstacles to collusion by enabling competing sellers to detect cheating from a coordinated price.

Most facilitating practices can serve procompetitive, as well as anticompetitive purposes. Advance announcements of price increases, for example, can benefit customers in their business planning by permitting them to place new orders before price increases are implemented or simply plan their business activity more coherently. But they also alert competitors to a seller's future price and allow them to counter with their own price announcements that may lead to a tacit negotiating process culminating in a higher market price. When facilitating practices lack any countervailing efficiency justification, courts have found them unlawful given the substantial likelihood of their increasing tacit collusion among oligopolists.[55]

As noted above, facilitating practices can be the product of agreement and, if so, are actionable under the Sherman Act. But where no more can be shown than unilateral, parallel adoption of a facilitating practice by members of an oligopoly, the unique scope of section 5 of the FTC Act can be used to prohibit them as an "unfair method of competition" upon an appropriate showing. In *E. I. du Pont de Nemours & Co. v. FTC ("Ethyl")* the Second Circuit Court of Appeals articulated the legal standard of liability under section 5 for unilateral conduct in an oligopolistic industry -- "absent a tacit agreement, at least some indicia of oppressiveness must exist such as (1) evidence of anticompetitive intent or purpose on the part of the producer charged, or (2) the absence of an independent legitimate business reason for its conduct."[56] The Court overturned the Commission's finding of liability under section 5, noting that there was no evidence the facilitating practices -- uniform delivered pricing, most-favored buyer contracts, and advance notice of price increases -- were adopted for other than legitimate business reasons and, in fact, were first adopted by Ethyl Corporation when it was the only producer in the market for lead-based gasoline antiknock compounds. The evidence also showed that customers favored the use of the challenged practices.

Until 1992, the facilitating practices theory saw little application. In June, 1992, the Commission, relying on the judicial standard enunciated in the *Ethyl* case, filed federal court actions against the three leading manufacturers in the highly-concentrated infant formula market. The complaints alleged a number of facilitating practices involving unilateral exchanges of information in connection with a government procurement bid.[57] Each of the complaints alleged that the respondent provided information to its competitors during the bidding process, "with anticompetitive intent and without an independent legitimate business reason" (the *Ethyl* standard), that provided assurances to competing bidders as to the company's bidding strategies for competitive bids, thereby reducing their uncertainty and resulting in substantially higher prices. Two of the defendants entered into consent agreements settling the charges.[58] In the case against the third, Abbott Laboratories, the federal district court found for the defendant. Relying on the *Ethyl* standard, the court found that Abbott's conduct represented reasonable and independent business reactions to inappropriate actions by the procurement authority, the alleged collusion of its competitors, who settled the FTC charges, and inaction by the responsible federal agency.

In recent years, the FTC has entered into several consent agreements in cases alleging that an invitation to collude violated section 5 of the FTC Act. Under this theory, solicitations to engage in anticompetitive conduct such as price fixing or market division, under some circumstances, may be unlawful as an unfair method of competition, even in the absence of a showing that a consummated agreement would have created monopoly power, as alleged in the *American Airlines* case.[59] Invitations to collude can facilitate collusion in oligopolistic markets but proving such a market structure is not a required element of this section 5 violation.[60] Invitations to collude may be explicit or implicit.[61] In *A.E.*

Clevite, Inc., the Commission's complaint alleged that the general manager of the respondent's bearings division advised a rival company's official that the rival's prices for locomotive engine bearings were lower than the respondents' and as a result were "ruining the marketplace." The respondent subsequently faxed its US aftermarket price lists to the competitor. While the complaint alleged that the combined market shares of the two manufacturers exceeded 95 percent, it did not allege that a monopoly would have been achieved upon acceptance of the solicitation.

The Commission's most recent case, *Stone Container Corporation*, involved an innovative course of conduct that implicitly invited competitors to join a coordinated price increase. Following a failed attempt in 1993 to achieve a price increase for liner board, senior officers of Stone Container allegedly surveyed its competitors by telephone to determine the dimensions of their inventory, and subsequently contacted senior officers of its competitors to communicate its intentions to suspend production at five of its nine mills, to draw down its inventory level and simultaneously to purchase a significant volume of its competitors' excess inventory, and its belief that these actions would support a price increase. The complaint identifies additional factors that support the characterization as an invitation to collude: the mill downtime and liner board purchases were outside of the ordinary course of business; the high-level communications initiated by Stone Container were likewise extraordinary; and the entire scheme was undertaken without an independent legitimate business justification.

Because all Commission cases brought under this theory have been settled, there is no written opinion stating the Commission's analytical basis for the use of section 5 in these cases, nor has the Commission's theory been tested in court. However, Commission officials have offered possible theories of competitive harm, all of which are based on the notion that firms do not usually engage in irrational acts. One theory is that an invitation to collude is a special type of facilitating practice that can facilitate tacit collusion in an oligopolistic market by signaling the solicitor's intentions for future pricing or output.[62] Other theories do not depend on an oligopolistic market structure.[63]

3. Conclusion

The three principal US antitrust laws combine to provide a comprehensive system of prohibitions against anticompetitive coordinated behavior.

Sections 1 and 2 of the Sherman Act proscribe collusive agreements among competitors, but do not reach mere interdependent pricing. Accordingly, courts and antitrust enforcers often must undertake the difficult task of determining whether an agreement has actually occurred. Direct proof is rare and inferences must often be drawn from circumstantial evidence.

Section 7 of the Clayton Act attempts to prevent problems associated with oligopolies by prohibiting, among other things, mergers which significantly increase the likelihood for coordinated effects (including both collusion and oligopoly pricing). Recognizing that not all concentrated markets lead to anticompetitive coordination, the focus in these cases often centers on determining whether the relevant market is conducive to such effects.

Section 5 of the FTC Act prohibits practices that facilitate collusion, and thus might be used in instances where neither the Sherman Act nor Clayton Act apply.

As the theoretical understanding of oligopolies evolves, courts and enforcement officials are increasingly apt to employ economic analysis to resolve questions about the legality of specific behavior.

NOTES

1. The term "collusion," as used herein, refers to horizontal agreements on price, output, or allocation of customers or markets of the type commonly found to be *per se* illegal under the Sherman Act.

2. *See, e.g.*, Jeffrey M. Perloff & Klaas T. van t'Veld, Carlton & Perloff, Modern Industrial Organization 175 (2d ed. 1994).

3. George Stigler, *A Theory of Oligopoly*, 72 J. Pol. Econ. 44 (1964).

4. *See, e.g.*, Jonathan B. Baker, *Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory*, 39 Antitrust Bull. 143, 154 n.20 (1993).

5. George Stigler, *A Theory of Oligopoly*, 72 J. Pol. Econ. 44 (1964). For a discussion of the effect of Stigler's article on subsequent analysis of oligopoly behavior, *see* Jonathan B. Baker, *Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory*, 39 Antitrust Bull. 143, 150-57 (1993); Willard K. Tom, *Game Theory In The Everyday Life Of The Antitrust Practitioner*, 5 Geo. Mason L. Rev. 457, 458-59 (1997).

6. Employing a "one-shot game" model, Stigler concluded that incentives to cheat are typically so strong that oligopolists would seldom deem coordination worthwhile. Modern theorists have used "repeat game" models (in which participants interact repeatedly over time) to demonstrate that, where market uncertainties can be overcome, the short-term incentive to cheat can be outweighed by the long-term benefits from cooperation. Jonathan B. Baker, *Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory*, 39 Antitrust Bull. 143, 153-69 (1993).

7. *See* Donald F. Turner, *The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal*, 75 Harv. L. Rev. 655 (1962).

8. *See, e.g.*, Willard K. Tom, *Game Theory In The Everyday Life Of The Antitrust Practitioner*, 5 Geo. Mason. L. Rev. 457, 460 (1997) ("As the [pre-Stigler] structuralists viewed it, all an oligopolist needed to do in order to earn supracompetitive profits was to charge a high price, confident that all of its competitors would be making the same calculation. From a [modern] game theoretic perspective, it is not so easy. Agreeing on terms, detecting deviations, and punishing deviations all pose problems.").

9. Richard A. Posner, Antitrust Law, An Economic Perspective 47 (1976) (citing Stigler, supra note 3). Under this Stiglerian approach, "interdependent" pricing is, in fact, the product of a "'cartel' that requires no detectable machinery of collusion - the 'cartel' in which collusion is effectuated by a purely tacit meeting of the minds, a mutual forbearance to carry production to [competitive levels] where price equals marginal cost." *Id.*

10. *See, e.g.*, Willard K. Tom, *Game Theory In The Everyday Life Of The Antitrust Practitioner*, 5 Geo. Mason L. Rev. 457, 459-60 (1997); Jonathan B. Baker, *Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory*, 39 Antitrust Bull. 143 (1993).

11. Willard K. Tom, *Game Theory In The Everyday Life Of The Antitrust Practitioner*, 5 Geo. Mason L. Rev. 457, 460 (1997).

12. Donald F. Turner, *The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal*, 75 Harv. L. Rev. 655, 665 (1962).

13. *See*, Jonathan B. Baker, *Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory*, 39 Antitrust Bull. 143, 207-09 (1993).

14. Sherman Act violations may be prosecuted by the federal government, state governments, and/or private plaintiffs.

15. *See, e.g.*, United States v. Trenton Potteries Co., 273 US 392 (1927) (holding price-fixing agreements *per se* illegal); Addyston Pipe & Steel Co. v. United States, 175 US 211, 240-241 (1899) (combination to allocate business among participants was "necessarily a restraint upon interstate commerce" illegal under the Sherman Act); United States v. Socony-Vacuum Oil Co., 310 US 150, 223 (1940) ("under the Sherman Act a combination formed for the purpose and with the effect of raising, depressing, fixing, pegging or stabilizing the price of a commodity in interstate or foreign commerce is illegal *per se*"); Palmer v. BRG of Georgia, Inc., 498 US 46 (1990) (market division agreements among actual or potential competitors illegal).

16. *See, e.g.*, Continental T.V., Inc. v. GTE Sylvania Inc., 433 US 36, 49 (1977) (under the rule of reason "the factfinder weighs all of the circumstances of a case in deciding whether a restrictive practice should be prohibited as imposing an unreasonable restraint on competition"); National Society of Professional Engineers v. United States, 435 US 679, 691 (1978) (rule of reason inquiry should focus on determining whether the agreement "promotes competition or . . . suppresses competition").

17. In this respect, tacit collusion refers to a conscious agreement requiring the active participation of a group of conspirators, but which is effected through less than express means (such as signaling conduct or exchanges of sensitive business information).

18. *See* William E. Kovacic, *The Identification and Proof of Horizontal Agreements Under the Antitrust Laws*, 38 Antitrust Bull. 5 (1993).

19. Local Union No. 189, Amalgamated Meat Cutters v. Jewel Tea Co., 381 US 676, 720 (1965) (Goldberg, J., concurring in part and dissenting in part). *See also, e.g.*, Todorov v. DCH Healthcare Auth., 921 F.2d 1438, 1456 (11th Cir. 1991) ("only in rare cases . . . can a plaintiff establish the existence of a section 1 conspiracy by showing an explicit agreement"); *In re* Petroleum Prods. Antitrust Litig., 906 F.2d 432, 439 (9th Cir. 1990) ("direct evidence will rarely be available"), *cert. denied*, 500 US 959 (1991).

20. *See, e.g.*, ES Dev., Inc. v. RWM Enters., 939 F.2d 547, 553-54 (8th Cir. 1991) ("it is axiomatic that the typical conspiracy is 'rarely evidenced by explicit agreements,' but must almost always be proved by 'inferences that may be drawn from the behavior of the alleged conspirators'") (quoting H.L. Moore Drug Exch. v. Eli Lilly & Co., 662 F.2d 935, 941 (2d Cir. 1981), *cert. denied* 459 US 880 (1982)), *cert. denied*, 502 US 1097 (1992).

21. *See, e.g.*, Theater Enterprises v. Paramount Film Distributing Corp., 346 US 537 (1954) (holding that parallel behavior alone is insufficient to prove a section 1 conspiracy); Wallace v. Bank of Bartlett, 55 F.3d 1166, 1168 (6th Cir. 1995) ("[P]arallel pricing, without more, does not itself establish a violation .... Courts require additional evidence which they have described as 'plus factors'"), *cert. denied*, 516 US 1047 (1996).

22. Matsushita Electrical Industrial Co. v. Zenith Radio Corp., 475 US 574, 588 (1986) (quoting Monsanto Co. v. Spray-Rite Service Corp., 465 US 752, 764 (1984)). The Court noted previously in its opinion that to have standing to bring an antitrust action, plaintiffs must allege injury to competition and injury to themselves. *Id*. at 583 (comparing Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., 429 US 477, 488-89 (1977)).

23. For discussion of traditional plus factors considered by courts, *see, e.g.*, Jonathan B. Baker, *Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory*, 39 Antitrust Bull. 143 (1993); ABA Antitrust Section, Antitrust Law Developments (Fourth) 10-14 (4th ed. 1997).

24. *See, e.g.,* Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 US 209 (1993) (demonstrating the difficulties of proving tacit collusion). *See also, e.g.,* Jonathan B. Baker, *Two Sherman Act section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory*, 38 Antitrust Bull. 143 (1993) (suggesting that as we learn more about interdependent (non-collusive) behavior, it becomes more difficult to prove tacit collusion).

25. *See generally* ABA Antitrust Section, Antitrust Law Developments (Fourth) 10-14 (4th ed. 1997) (discussing the persuasiveness of various evidentiary factors).

26. Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 US 574, 587 (1986).

27. *See, e.g.*, Jonathan A. Baker, *Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory*, 38 Antitrust Bull. 143 (1993). For a detailed discussion of factors rendering markets more or less prone to collusion, *see* Richard A. Posner, Antitrust Law, An Economic Perspective 55-71 (1976).

28. *See, e.g.*, Richard Posner & Frank Easterbrook, Antitrust Cases, Economic Notes and Other Materials 341 (2d ed. 1981) ("[I]f the economic evidence warrants an inference of collusive pricing, there is neither legal nor practical justification for requiring evidence that will support the further inference that the collusion was explicit rather than tacit."); Richard A. Posner, Economic Analysis of Law 288-90 (4th ed. 1992) (identifying evidence probative of collusion). *See also, e.g.*, Robert F. Lanzillotti, *Coming To Terms With Daubert In Sherman Act Complaints: A Suggested Economic Approach*, 77 Neb. L. Rev. 83 (1998) (offering an economic approach to determine whether actual supracompetitive bid pricing resulted from agreement).

29. *See, e.g.*, VI Phillip E. Areeda, Antitrust Law ¶1407e (1986) ("Uncertainty is the most general of the impediments to cartel-like results in oligopoly. It follows that collective practices reducing such uncertainty . . . are dangerous to competition. . . . [Where] [t]here are no procompetitive redeeming virtues in permitting [an agreement] . . . there is no difficulty in concluding that the agreement . . . is itself an unreasonable restraint of trade. Therefore the Sherman Act is violated.").

30. *See, e.g.*, United States v. Container Corp. of America, 393 US 333 (1969) (exchanges of information regarding most recent prices charged or quoted among sellers of corrugated shipping containers violated section 1); United States v. Airline Tariff Publishing Co., 836 F.Supp. 9 (D.D.C. 1993) (approving consent decree settling challenge by US that domestic airlines used computerized fare exchange system to signal future price decisions).

31. *See* ABA Antitrust Section, Antitrust Law Developments (Fourth) 89 (4th ed. 1997) ("Information exchanges, or agreements to share information, are not in themselves illegal *per se*. They are judged under the rule of reason. Applying the rule of reason, courts have prohibited information exchanges in industries whose structural characteristics (such as high concentration) indicate that the exchanges are likely to have anticompetitive effects.") (Citations omitted).

32. *See, e.g.,*United States v. Yellow Cab Co., 332 US 218 (1947); American Tobacco Co. v. United States, 328 US 781, 809 (1946).

33. *See, e.g.*, American Tobacco v. United States, 328 US at 809; Seagood Trading Corp. v. Jerrico, Inc., 924 F.2d 1555, 1573-75 (11th Cir. 1991).

34. *See, e.g.,* ABA Section of Antitrust Law, Antitrust Law Developments (Fourth) 302-303 (4th ed. 1997) ("Whether a conspiracy to monopolize exists is ordinarily a question of fact to be resolved under the same principles that govern conspiracies in restraint of trade under Section 1 of the Sherman Act.").

35. American Tobacco v. United States, 328 US at 809.

36. *Id.*

37. *See*, e.g., Great Escape, Inc. v. Union City Body Co., 791 F.2d 532, 541 (7th Cir. 1986) (refusing to infer specific intent where there was no evidence of "predatory conduct," which the court defined as "conduct that is in itself an independent violation of the antitrust laws or that has no legitimate justification other than to destroy or damage competition"); Pacific Engineering & Production Co. v. Kerr-McGee Corp., 551 F.2d 790, 795 (10th Cir. 1976) ("'[t]o prove that a person has that type of exclusionary intent which is condemned in anti-trust cases there must be evidence that the person . . . intends to use or actually does use unfair weapons'") (quoting Union Leader Corp. v. Newspapers of New England, Inc., 180 F. Supp. 125, 140 (D. Mass. 1960)), *cert. denied* 434 US 879 (1977). *See also, e.g.*, Bailey's, Inc. v. Windsor Am., Inc., 948 F.2d 1018, 1032 (6th Cir. 1991) (improbable that firm with 10 percent share could possess specific intent to monopolize market); Optivision, Inc. v. Syracuse Shopping Ctr. Assocs., 472 F. Supp. 665, 680 (N.D.N.Y. 1979) ("the absence of any serious likelihood of successfully achieving monopolization [supports] a finding of lack of specific intent").

38. IIIA Philip E. Areeda and Herbert Hovenkamp, Antitrust Law ¶809 (1996).

39. *Id.*

40. 119 S. Ct. 493 (1998).

41. *Id.* at 500 ("We do not see, on the basis of the facts alleged, how Discon could succeed [under § 2] without prevailing on its §1 claim.").

42. Nancy Trethewey, *Finally: Some Guidance On Section 2 Conspiracies*, 5 The Sherman Act Almanac 4 (1999).

43. *See, e.g.*, Brown Shoe Co. v. United States, 370 US 294 (1962); United States v. Philadelphia National Bank, 374 US 321 (1963); Federal Trade Commission v. Proctor & Gamble, 386 US 568 (1967).

44. Federal Trade Commission v. Procter & Gamble, 386 US 568 (1967). *See also, e.g.*, Brown Shoe Co. v. United States, 370 US 294 (1962); Hospital Corp. of America v. FTC, 807 F.2d 1381, 1389 (7th Cir. 1986) ("[a]ll that is necessary is that the merger create an appreciable danger of [anticompetitive] consequences in the future. A predictive judgment, necessarily probabilistic and judgmental rather than demonstrable, is called for"), *cert. denied*, 481 US 1038 (1987)(citation omitted); FTC v. Staples, 970 F. Supp. 1066 (D.D.C. 1997).

45. Brown Shoe, 370 US at 323.

46. Hospital Corp. of America v. FTC, 807 F.2d 1381, 1389 (7th Cir. 1986), *cert. denied*, 481 US 1038.

47. *See, e.g.*, United States v. Penn-Olin Chem. Co., 378 US 158, 170-71 (1964) ("The grand design of the original §7 . . . was to arrest incipient threats to competition which the Sherman Act did not ordinarily reach").

48. Philadelphia National Bank, 374 US 321 (1963); Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 US 209, 227-230 (1993) (stating that "oligopolistic price coordination or conscious parallelism, . . . [is] not in itself unlawful" but noting that "[i]n the §7 context, it has long been settled that excessive concentration and the oligopolistic price coordination it portends, may be the injury to competition the Act prohibits"). Similarly, section 7 can be employed to block mergers that create unilateral market power, the exercise of which would not necessarily run afoul of the Sherman Act.

49. Indeed, if the post-merger market is perfectly conducive to coordination one might predict not only that the transaction "may tend substantially to lessen competition," (the section 7 standard) but that post-merger coordination (in the form of interdependent behavior) is actually more likely than not to occur.

50. *See, e.g.,* Richard A. Posner, Antitrust Law, An Economic Perspective 56 (1976) ("No responsible economist would claim today that concentration was the *only* factor predisposing a market to collusion."); Richard Posner and Frank Easterbrook, Antitrust Cases, Economic Notes and Other Materials 41-43 (2d ed. Supp. 1984) ("[w]e must be very cautious of claims that concentrated markets are not competitive markets").

51. Federal Trade Commission and Department of Justice Joint Horizontal Merger Guidelines (1992). Section 2.1 of the Guidelines sets forth a basic framework for assessing the conduciveness of the market to coordination based on the ability of firms to reach terms of coordination, detect deviations from those terms, and punish deviators.

52. For a discussion of "maverick" firms and the implications of their elimination through merger, see Jonathan B. Baker, *Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory*, 38 Antitrust Bull. 143, 199-207 (1993). *See also* Posner, supra note 18 (discussing factors enhancing conduciveness to collusion).

53. VI Phillip E. Areeda, Antitrust Law, ¶ 1407 b (1986).

54. *Id.* at ¶ 1435.

55. *See, e.g.,* National Macaroni Manufacturers Association v. FTC, 345 F.2d 421 (7th Cir. 1965) (agreement to standardize content of macaroni); FTC v. Cement Institute, 333 US 683 (1948) (agreement to use basing point system); United States v. Container Corp. of America, 393 US 333 (1969). *Cf. In re* Petroleum Prods. Antitrust Litig., 906 F.2d 432 (9th Cir. 1990) (allowing jury to infer price fixing agreement from exchange of price information where "appellees' officers' own testimony indicates that there was essentially no purpose for publicly announcing [price information] other than to facilitate price coordination"), *cert. denied,* 500 US 959 (1991).

56. 729 F. 2d 128, 140 (2d Cir. 1984).

57. The complaint against Abbott alleged actual collusion.

58. The complaint against one of these parties, Mead Johnson, alleged two other facilitating practices – exchange of information among competitors on intentions not to advertise directly to consumers and letters from Mead to four states stating the dollar amount it intended to bid when these states requested sealed bids for contracts for the supply of infant formula ("price signaling").

59. United States v. American Airlines, Inc., 743 F.2d 114 (5th Cir. 1984), *cert. dismissed,* 474 US 1001 (1985) (attempted monopolization involving solicitation by one chief executive of an airline to his counterpart at another airline to fix prices). More recently attempted price fixing cases have been brought criminally under wire fraud or mail fraud statutes. *E.g.,* US v. Ames Sintering Co., 927 F.2d 232 (6th Cir. 1990).

60. *See, e.g.* Stone Container, C-3806 (1998), 5 Trade Reg. Rep. (CCH) ¶ 24,390; Quality Trailer Products Corp. ("Quality"), C-3403 (1992), 5 Trade Reg. Rep. (CCH) ¶ 23,246 (no allegation pertaining to market power).

61. An example of an explicit invitation to collude is the conduct in *Quality Trailer Products Corp.*, in which the complaint alleged that the respondent's representatives met with an officer of a competing firm and "told the competitor that its price ... was too low, that there was plenty of room in the industry for both firms, and that there was no need for the two companies to compete on price." The complaint further alleged that the officials "provided assurances" that Quality would not sell the products below a specified price. *See* ¶ 4 of complaint, Quality, *supra* note 60.

62. Arquit, The Boundaries of Horizontal Restraints: Facilitating Practices and Invitations to Collude, 61 *Antitrust Law Journal* 531, 544 (1993).

63. Even in the absence of an oligopolistic market structure, the soliciting party may believe it can exercise market power over a subset of customers in the market. Another theoretical basis is that enforcement against attempted collusion will achieve additional deterrence of actual collusion and is unlikely to inhibit procompetitive conduct, *i.e.*, integration efficiencies.

EUROPEAN COMMISSION

Introduction

An oligopolistic market is a market where there is a small group of large suppliers whose competitive actions are interdependent. In other words, unlike in perfectly competitive markets or monopolies, each firm needs to consider both its own as well as the reactions of its competitors. Some oligopolistic markets are characterised by fierce competition others may be characterised by anti-competitive co-ordinated behaviour[1].

The current paper discusses the Commission's approach to oligopolies. The paper first discusses the treatment of oligopolies under Article 85 and 86 of the Treaty[2]. As a matter of principle the Court has maintained that Article 85 can only apply to explicit co-ordination between companies and not to other forms of co-ordinated behaviour. However, as discussed in the paper there are nuances to be made to this general principle, which shows that the Commission is not without means to apply Article 85 to oligopolies. Article 86 on the other hand explicitly provides for the possibility of condemning abuses of oligopolistically dominant positions[3].

The second part of the paper sets out the Commission's past approach to the assessment of oligopolistic dominance under the EC Merger Regulation (ECMR). The judgement in *Kali & Salz*[4] in 1998 confirmed that the ECMR can be applied to oligopolistic dominance.

1. Ec antitrust policy towards oligopoly: articles 85 and 86 of the treaty

1.1 Article 85

An essential condition for article 85 of the EC Treaty[5] to apply is the existence of some form of explicit co-ordination between two or more undertakings. Absent this requirement, the EC Court of justice has consistently maintained that this provision could simply not apply. The most illustrative expression of this principle in this respect remains the judgement of the Court of Justice in the *Woodpulp* case[6], where the Court made it clear that parallel behaviour by itself does not constitute a concerted practice under Article 85 and that such a parallelism can be regarded as proving the existence of an agreement or a concerted practice only in cases where concertation, and not the oligopolistic structure of the market, constitutes the only plausible explanation for such parallel behaviour. In other words, anti-competitive parallel behaviour (for instance, high prices) not only constitutes a conduct perfectly compatible with Article 85 of the Treaty but also provides for a defence against any claims of concerted practices based on parallel behaviour on the market.

However, a quick review of the Commission practice under Article 85 shows that this general picture must be nuanced.

In fact, despite the legal obstacles outlined above, the EC Commission has used the possibilities offered by Article 85 to ensure control over situations which fall short of a typical cartel. These efforts have developed along the following two lines:

i) First, the Commission has resorted more and more to the use of indirect means of proof to show the existence of co-ordinated behaviour on the market in the absence of direct evidence of explicit collusion. In this context, the Commission usually resorts to the notion of concerted practice contained in Article 85 (1) of EC Treaty. This provision is indeed designed to prohibit any form of co-ordination between undertakings which, without having reached the stage where an agreement *strictu sensu* has been concluded, knowingly substitutes practical co-operation between them for the risk of competition[7].

In the context of oligopolistic markets the Commission has tried to look at some of the features typically characterising the market structure of an oligopoly (such as, in particular, the parallel conduct between competitors or the exchange of sensitive information between them in the context of trade associations etc.) as indirect evidence of the existence of a concerted practice.

However, as already mentioned above, the Court of Justice has not fully endorsed this approach. In this respect, in the Woodpulp judgement cited above the Court stated that parallel conduct does not constitute evidence of the existence of a concerted practice where it results from individual and rational decisions taken by the undertakings concerned having regard to the characteristics of the market in question. In sum, parallel conduct does not in itself constitute proof of a concerted practice, but can be used as strong evidence of the existence of an anticompetitive agreement if such behaviour does not correspond to the normal adaptation of market operations to market conditions.

ii) Second, in the absence of direct or indirect evidence of explicit collusion, the Commission has tried to challenge directly certain facilitating practices which often make possible co-ordinated behaviour in oligopolistic markets, on the assumption that these facilitating practices (such as exchange of information systems, joint ventures, etc.) can have an anti-competitive effect.

While it is widely acknowledged that in oligopolistic markets firms do not necessarily need formally to communicate, in so far as they reach a shared perception about how to maximise joint monopoly profits, it is also recognised that certain oligopolies may be inherently characterised by a high degree of defection among the members. Firms in oligopoly markets therefore develop certain facilitating devices that make tacit collusion easier by reducing the benefits of cheating, or by increasing the likelihood of detection or the costs of punishments. Typically, these practices consist of some form of exchange of information designed to render the market more transparent (public announcement of prices, exchange of information regularly undertaken in the context of some professional associations and so on).

In challenging this type of behaviour, however, the Commission needs to be more cautious, due essentially to some reluctance shown in the past by the Court of justice to endorse such an approach. Indeed, in *Wood pulp* the Court of justice stated that the practice of periodically announcing prices designed to improve the transparency of the market can neither be considered anti-competitive as such, nor does it constitute sufficient evidence of the existence of a price fixing agreement.

However, the position taken by the Court of First Instance in a more recent case (*Fiatagri*[8]) may cast a new light on this issue. In essence the Court has upheld a Commission decision prohibiting a sophisticated system of exchange of information set up by a number of tractor manufacturers in the UK, aimed at monitoring the sales in the market with a view to preventing parallel imports. In the judgement, the Court explicitly states that «*the decision is the first in which the Commission has prohibited an information exchange system which does not (…) underpin any other anticompetitive arrangement either*». In endorsing the Commission position, the Court seems therefore to accept that these practices can be directly challenged even in the absence of more comprehensive anti-competitive agreement between the parties. Secondly, when pointing to the anti-competitive effects of the practice, the Court refers to the fact that «*general use of exchange of price information on a highly concentrated oligopolistic market on which*

competition is already greatly reduced and exchange of information facilitated is likely to impair considerably the competition which exists between traders». In that respect, the Court seems to focus on the anti-competitive potential effects of the practice having regard to the structural conditions existing on the market at least whenever the exchange of information system implies the existence of an anti-competitive agreement. This judgement has also been recently upheld by the Court of Justice.[9]

1.2 Article 86 – Abuse of collective dominance

As opposed to Article 85, in general terms Article 86 of the EC Treaty can be regarded as a more appropriate legal tool to deal with oligopoly issues. This provision explicitly provides for the possibility of condemning abuses of a collective dominant position[10]. It is designed to control anti-competitive behaviour by one or more firms enjoying a significant degree of market power (the so-called dominance), with a view to either exploit this position to gain supracompetitive profits (exploitative abuses) or to drive the other competitors out of the market (exclusionary abuses).

Two essential requirements are thus to be fulfilled for this provision to apply: a) the existence of a dominant position on a given market which enables a firm (or several firms) to act independently of its competitors, its customers and ultimately, of consumers and b) behaviour which is deemed abusive in the sense of Article 86.

Based then on the assumption that the members of an oligopoly enjoy a collective dominant position, any strategic conduct undertaken by these firms resulting from interaction on the market and designed to earn supra competitive profits (such as price increase and output reduction) may be caught by Article 86[11].

In this connection, it must be noted that, there has been some debate as to the scope of the notion of collective dominance under Article 86 as endorsed by the EC jurisprudence. In this respect, the few cases of abuse of collective dominance judicially reviewed by the EC Courts concerned market situations characterised by the existence of economic links of a structural nature between the undertakings involved.

In particular, the Court of First Instance stated in its Flat Glass judgement[12] that «there is nothing in principle to prevent two or more independent economic entities from being, on a specific market, united by such economic links that, by virtue of that fact, together they hold a dominant position vis-à-vis the other operators on the same market. This could be the case where two or more independent undertakings jointly have, through agreements or licences, a technological lead affording them the power to behave independently of their competitors, their customers and ultimately of their consumers». Also in the recent Cewal judgement, the Court stated that in order for a collective dominant position to exist, the undertakings in question must be linked in such a way that they adopt the same conduct on the market[13].

In this regard, it is worth remembering that the concept of oligopolistic dominance generally acknowledged in standard antitrust economics is not primarily founded on the presence of links between their members. In particular standard economic analysis identifies a number of factors which are generally considered relevant for ascertaining the existence of an oligopoly. The presence of links between the members of an alleged oligopoly constitutes simply an additional factor which reinforces the risks of oligopolistic dominance. An oligopoly can thus be proved on the basis of the analysis of the features of the market, even in the absence of structural links between the members of the alleged oligopoly.

The recent judgement of the Court of First Instance in the Gencor case[14] has confirmed that Article 86 can apply in cases where the dominant position can be established on the basis of the structural characteristics of a typical oligopolistic market and not on the existence of structural links among the members of the oligopoly. Indeed, according to the Court *: "In its judgement in the Flat Glass case, the*

Court referred to links of a structural nature only by way of example and did not lay down that such links must exist in order for a finding of collective dominance to be made. It merely stated (at paragraph 358 of the judgement) that there is nothing, in principle, to prevent two or more independent economic entities from being united by economic links in a specific market and, by virtue of that fact, from together holding a dominant position vis-à-vis the other operators on the same market. It added (in the same paragraph) that that could be the case, for example, where two or more independent undertakings jointly had, through agreements or licences, a technological lead affording them the power to behave to an applicable extent independently of their competitors, their customers and, ultimately, of consumers. Nor can it be deduced from the same judgement that the Court has restricted the notion of economic links to the notion of structural links referred to by the applicant. Furthermore, there is no reason whatsoever in legal or economic terms to exclude from the notion of economic links the relationship of interdependence existing between the parties to a tight oligopoly within which, in a market with the appropriate characteristics, in particular in terms of market concentration, transparency and product homogeneity, those parties are in a position to anticipate one another's behaviour and are therefore strongly encouraged to align their conduct in the market, in particular in such a way as to maximise their joint profits by restricting production with a view to increasing prices. In such a context, each trader is aware that highly competitive action on its part designed to increase its market share (for example a price cut) would provoke identical action by the others, so that it would derive no benefit from its initiative. All the traders would thus be affected by the reduction in price levels."

2. The factors considered in the assessment of oligopolies under the ec merger regulation (ecmr)

2.1 The dominance test under the ecmr

Art.2 (3) of the ECMR states that 'a concentration which creates or strengthens a dominant position as a result of which effective competition would be significantly impeded in the common market or in a substantial part of it shall be declared incompatible with the common market.' This provision has been interpreted by the Court of Justice in the Kali & Salz case[15] as covering both single and collective dominance. Therefore, the ECMR can be applied to oligopolistic dominance arising from a merger.

It is a merger's impact on the strategic interaction between the firms belonging to the oligopoly, which is the focal point of the assessment of oligopolistic dominance in the context of merger control. In the past the concern has not been whether a merger increased the risk of creating a cartel, but whether the merger would lead to an anti-competitive market outcome due to implicit co-ordination, and consequently create or strengthen an oligopolistically dominant position. In the Commission's approach the assessment of whether a merger will lead to the creation or strengthening of an oligopolistically dominant position can be thought of as involving three different steps. First, the supply structure is examined and the members of the oligopoly are identified. Second, the structural characteristics of the market are analysed in order to see whether the market is prone to oligopolistic dominance, and finally, the impact of the merger on the competitive relationship between the oligopolists is analysed with a view to determining how the merger will affect the incentives of the members of the oligopoly to compete with each other following the merger.

2.2 Defining the oligopoly

Oligopolistic markets are rarely characterised by having only a few large firms. Rather there are normally a few large firms and a fringe of smaller companies. In an oligopolistic market it is normally the competitive interactions between the oligopolists, which are decisive for the market outcome. The purpose of defining the oligopoly is, therefore, to identify the firms between which the competitive interactions are

decisive for the market outcome. In other words it needs to be determined which companies are part of the oligopoly, and which companies are part of the fringe.

As a first indication of the structure of the oligopoly the Commission will look at the market shares of the suppliers in the market[16]. If a few companies have very large market shares, say three companies have 25 percent each, and the rest of the supply is accounted for by ten smaller suppliers each with 2-3 percent market share, then this could be an indication that the ten smaller companies should be considered fringe companies, who are simply followers to the larger companies. In other words it could be an indication that the main competitive interactions deciding the market outcome are those between the three larger companies.

Whether a company belongs to the fringe or is part of the oligopoly depends on the specific market circumstances. This assessment has to be based on the particular circumstances of the market in question. Capacity or access to key raw materials may, for example, in some cases be used to determine which companies are part of the oligopoly and which companies are part of the fringe. In IV/M.619 Gencor/Lonrho, for example, access to platinum ore reserves was crucial for the ability to compete in the platinum industry, and defined the oligopoly. However, depending on the circumstances, in some markets even smaller firms may be able to compete on an equal footing with the largest suppliers. In such markets such smaller firms would have the possibility to act as "maverick firms", and would have to be considered as competitors in the same sense as the oligopolists, and not simply as belonging to the fringe.

In short, the oligopoly will include all those firms, who as a group have the ability to raise prices above the competitive level and who, if left out, would make it impossible for the others to achieve the anti-competitive outcome.

2.3 Market characteristics

Having identified the oligopoly the Commission will analyse whether the market is likely to be conducive to oligopolistic dominance. The underlying assumption is that in markets, which are transparent, develop relatively slowly (for example by having low growth, low rate of technological development, and homogeneous products) and are subject to high barriers to entry, it is more likely to find oligopolistic dominance, since in such markets it is often easier for suppliers to detect competition and respond correspondingly. In other words, the threat of retaliation is likely to be prompt and credible in such markets. In contrast fast developing, less transparent markets, where competition takes place across a multitude of marketing parameters, and where barriers to entry are low, will provide fewer possibilities for detection of competition.

The Commission has in the past looked at the following characteristics in the assessment of whether markets are conducive to oligopolistic dominance:

- Market transparency is normally deemed to be a necessary condition for oligopolistic dominance, since the members of the oligopoly will not otherwise be able to detect and punish "unfair" competitive behaviour. Oligopolists sometimes even try to structure the of flow market information in such a way that transparency is increased (see IV/M.190 Nestle/Perrier, par. 121-122). The parameters which are important for market transparency differs from market to market. Generally though it is noted that market transparency tends to be higher the more concentrated a market is and that product homogeneity increases transparency, because it makes monitoring of prices easier. In the extreme case of a commodity traded world-wide at exchanges at standardised product specifications there is only one price to be monitored (see for example case IV/M.619 Gencor/Lonrho). Nevertheless, it should be noted that product differentiation is not necessarily an obstacle to

co-ordination, but it is possible that co-ordination could take other forms than price co-ordination. For example the result could be some kind of market sharing.

- Low rate of product and/or process innovation. It cannot be excluded that oligopolistic dominance can be found in markets with high rates of product and/or process innovation. An indication could be stable market shares in markets with high rates of innovation. However, industries with high rates of process and/or product innovation are normally assumed unlikely to be conducive to oligopolistic dominance.

- Mature market. In markets where demand is stagnant or only grows moderately there will be no impetus from market growth to foster competition in the market for two reasons. Firstly, there is no incentive among incumbent firms to compete for an increase in demand. Any gain in market share can only be achieved at the expense of competitors., possibly ending in a damaging price war with no winners. Secondly, a modest growth rate of demand does not attract outsiders to enter the market. A mature market is, therefore, more conducive to oligopolistic dominance than a high growth market.

- Price elasticity of demand. An inelastic price elasticity of demand may increase the incentive for oligopolistic dominance.

- Symmetry of costs. Oligopolistic dominance is more likely to be sustainable, if the oligopolists have similar cost structures. First, similar cost structures will normally create similar incentives in a given market situations. Second, similar cost structures increases the risk of retaliation, in the sense that a supplier will know that its competitors can meet its competitive actions on an equal basis. On the other hand differences in cost structures can be an important source of different competitive incentives of suppliers. It is, for example, normally much more difficult to retaliate against a competitor who has a lower cost base than its competitors. Therefore, it can be very important if a merger leads to similar cost structures of the members of the oligopoly (See for example IV/M.619 - Gencor/Lonrho).

- Symmetry of market shares can be an indication of similarity of incentives and of similarities in the scope for retaliation. However, market shares do not need to be completely symmetric in order for oligopolistic dominance to take place. It is quite conceivable that a merger will lead to one or more oligopolists being stronger than the other members in the oligopoly. In some situations there may even be a leader of the oligopoly. The important issue in the assessment of the symmetry of market shares is whether the market shares indicate a sufficient degree of similarity of incentives and retaliation possibilities. This can only be determined on a case by case basis.

- Structural links. The likelihood of oligopolistic dominance often increases if there are structural links between the oligopolists. Structural links could, for example, consist of joint ventures between the oligopolists or other types of co-operation agreements. Such links may reduce the competitive zeal between the oligopolists, they may represent potential means of retaliation and depending on the circumstances such links could also result in a certain common commercial interest in the market in question. Therefore, the impact of a merger in terms of whether it creates or give a different quality to such structural links needs to be assessed. However, structural links are not a necessary condition for a finding of oligopolistic dominance.

- Multimarket contacts can help to sustain oligopolistic dominance, because they may increase the scope for retaliation, since retaliation could also take place in other markets.

The initial focus on the structural characteristics of the market allows the Commission to assess whether the market is conducive to oligopolistic dominance. It is normally considered that a relatively slowly developing market, which is transparent, is more conducive to oligopolistic dominance than a differentiated and more dynamic market, for example a market with a high degree of product and process innovation. However, the Commission does not exclude that also differentiated, dynamic growth markets could be conducive to oligopolistic dominance. It depends on the circumstances. However, it is quite possible that oligopolistic dominance in such circumstances would rather result in a market sharing along geographic lines or product markets.

2.4. The assessment of the impact of the merger

The assessment of the impact of a merger on competition will depend on whether a merger leads to the creation or strengthening of an oligopolistically dominant position. It is, therefore, necessary to first analyse the past level of competition in order to determine whether an oligopolistically dominant position already existed in the pre-merger situation. Furthermore, an analysis of the level of competition in the market in the past can also provide important information as to whether a merger is likely to lead to the creation of a dominant position. On that basis it is then assessed which impact the merger has on competition in the market.

2.4.1 Past level of competition

In its analysis of past competition the Commission have analysed a number of different factors including:

Past movements in market shares and prices. The Commission will often start its assessment with an analysis of the fluctuations of past market shares and prices movements. A high degree of stability of market shares or prices could be an indication of a low degree of rivalry in the past. In particular a symmetric distribution of market shares among the leading firms (the oligopolists) may already reflect a certain co-ordination, especially in those cases where this pattern has been observed for a longer period. In such a market situation it is often more likely that a merger may lead to the creation or strengthening of an oligopolistically dominant position. On the other hand fluctuations in market shares and prices in the past cannot be taken as an indication that a merger will not lead to oligopolistic dominance in the future. It is only an indication that there has been competition in the past.

Past existence of excess capacity. Tacit or actual collusion often leads to spare capacity since output is restricted to below the pre-collusive level in order to raise price. There is, therefore, always an incentive for firms to use this idle capacity by increasing their output, since their marginal revenue is greater than their marginal cost. This is particularly the case in industries where the percentage of fixed costs to total costs is high (operating leverage). However, in a situation of oligopolistic dominance spare capacity may be used as a tool to sustain an anti-competitive outcome. First, it may help to deter entry. The incumbent firms are able to start cutting prices down to marginal costs. This is particularly effective in industries with a high operating leverage. Second, it may help to sustain collusion among the incumbents since punishing those who cheat is easier.

Past history of co-operative behaviour. The analysis of past strategies or behaviour of the players in a market might give useful insights into the future likely behaviour of the oligopolists as well as into the motives for the merger. This is for example true in markets where there have been structural links or which have a long-standing history of cartel behaviour. However, such elements are of course not sufficient to block a merger. In the case M.1225 Enso/Stora, for instance, the Commission was well aware of a past

cartel in the market for cartonboard, where one of the merging parties has been fined. However, the Commission in its final decision did not oppose the merger. Markets with a history of co-operation therefore can only lead to a presumption of cartel behaviour.

Assessing the impact of a merger on competition between the oligopoly members

Having analysed past competition, the Commission then determines the impact of the merger on competition. The Commission has particularly focused on whether there are changes to the incentives to compete and the capacity of the individual oligopoly members to retaliate against competitive actions from other oligopoly members. A merger may affect an oligopolistic market in a number of ways, for example by increasing the market transparency, reduce countervailing buyer power. Therefore, in its assessment of the impact of the merger the Commission will first analyse how the merger impacts on the structural characteristics of the market (see section 2.3. above).

After having analysed the impact on the market structure, the Commission will analyse how the merger is likely to affect the competitive interactions between the members of the oligopoly. The aim is to establish whether the merger will (further) facilitate oligopolistic dominance and thereby lead to a strengthening or creation of a dominant position.

The Commission normally has to establish a causal link between the merger and the creation or strengthening of an oligopolistically dominant position. In this respect the Commission may rely on the C2, C3 C4 etc. or the HHI as indicators of the change in the concentration level. However, even with a large change in the HHI it is often very difficult to establish causality and important policy questions arise. It is for example clear when looking at an industry consolidation process, that there is a change when the number of suppliers goes down. However, the question is at what point the important change takes place. Is it when number 4 and 5 merge or number 3 and 4 etc? No clear answers exist to this question.

2.5 External competitive constraints on the oligopoly

As in cases involving single dominance, the Commission also analyses whether potential competition and countervailing buyer power are effective competitive constraints on the oligopoly.

2.5.1 Potential Competition

Potential competitors may be firms active in the same product market but in other geographic areas of the world (IV/M.315 DMV) firms active in neighbouring product markets or genuine newcomers. For all potential competitors there are a number of possible barriers to entry, which might make the oligopoly incontestable. Normally the most important barriers are sunk costs, economies of scale, time lags which give the incumbents time to prepare a counter strategy, and cost or demand disadvantages such as licences, control of essential facilities.

2.5.2 Buyer Power

The ability of oligopolists to raise prices can be constrained by countervailing market power of customers. Powerful and concentrated customers may either prevent the oligopolists from engaging in parallel behaviour or provide a sufficient incentive to deviate from collusion and compete. This can be done in two ways. Firstly, customers may be able to play off suppliers against one another with a credible threat to switch between them. A short term switch would only be possible if the other suppliers have enough spare capacity to fill the large order. A second strategy would be the development of a new

supplier or a credible threat to produce the good in question in-house. In case IV/M.1225 Enso/Stora the Commission's investigation showed that the largest customer of liquid packaging board, Tetra Pak, had been instrumental in developing two of its current suppliers into producers of liquid packaging board. In case IV/M.337 Knorr Bremse/Allied Signal the Commission took into account that the demand side, consisting of truck manufacturers, was not only highly concentrated and aiming at a reduction of the number of automotive suppliers but also to a considerable extent technically capable of designing and producing in-house.

A highly concentrated demand side, however, does not necessarily imply countervailing buyer power. In IV/M.190 Nestle/Perrier the Commission concluded that even the large French retail chains were unable to countervail the emerging duopoly of mineral water producers. Moreover, even when there is, in the extreme, a bilateral oligopoly, the market outcome may be at best neutral in cases where the intermediate firms face competition downstream or worse in that the intermediate firms may either pass on the price increase or even add their own supracompetitive margin (double marginalisation problem).

2.6 Conclusion

Mergers in oligopolistic markets may create or strengthen the exercise of market power through co-ordinated behaviour. Assessing collective dominance involves identifying those factors that can make oligopolistic dominance work. The starting point is always the identification of the oligopoly for which concentration measures such as the C2, C3, C4 etc. ratios have become standard. However, which of the structural, behavioural or external factors tip the balance towards a negative decisions has to be decided on a case by case basis.

NOTES

1. By coordination is basically meant market situations in which oligopolists adopt, with or without communicating with their rivals, strategies that recognise that they interact, and as a result have a detrimental effect on competition. See for example J. Baker, Developments in Antitrust Economics, Journal of Economic Perspectives Vol. 13, 1/1999, pp. 181-194 for a more detailed discussion.

2. The reference to the Treaty Articles will be changed with the entering into force of the Amsterdam Treaty on 1 May 1999.

3. Oligopolistic dominance, collective dominance and joint dominance are used as synonyms in this paper.

4. Case C-68/96, see part B below.

5. Article 85(1) of the EC Treaty provides the following "The following shall be prohibited as incompatible with the common market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which as their object or effect the prevention, restriction or distortion of competition within the common market, and in particular those which:

   a) directly or indirectly fix purchase or selling prices or any other trading conditions;

   b) limit or control production, markets, technical development or investment;

   c) share markets or sources of supply;

   d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

   e) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which by their nature or according to commercial usage, have no connection with the subject of such contracts.

6. See case C-89/95, C-104//85, C-114/85, C-116/85, C-117/85, and C-125/85 to C-129/85, *Ahlström Osakeyhtiö and Others v. Commission*, (1993) I-1307.

7. Case 40/73, *Suiker Unie v Commission*, (1975) 1663; case 100/80, *Musique Diffusion française v Commission*, (1983) ECR 1825; cases T-1/89 to T-15/89, *Rhone-Poulenc SA and Others v Commission* (*Polypropylene*) (1991) ECR II-867

8. Case T-34/92, *Fiatagri and New Holland v Commission*, (1994) ECR II-907; see also T-35/92, *John Deere v Commission*, (1994) ECR II-957.

9. With regard to the issue of advance price announcements, the Wood Pulp judgment has been clarified by the Court of Justice in *John Deere*. Thus at paragraph 91 of the judgement in that case the Court stated that „It is true that in [Wood Pulp] the Court held, at paragraph 64, that the system of quarterly price announcements on the wood pulp market did not in itself constitute an infringement of Article 85 (1) of the Treaty. However the system of quarterly announcements of paper pulp sale prices set up by the manufacturers involved the communication of information of use to purchasers, whereas the information exchange system in question in the present case enables information to be shared only by the undertaking which are members to the agreement." This clarification is important in two respects. First, private information exchanges between the participants are not covered by *Wood Pulp.* Secondly, even price announcements to buyers or the general public are not accepted . To generally fall outside Article 85(1) the

information communicated must be *of use to purchasers*, implying that the announcements must serve a legitimate purpose on the market in question. It is not sufficient that the announcements are made to buyers or in public.

10. Article 86 of the EC Treaty provides the following " Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between member states.

Such abuse may in particular consist on:

a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;

b) limiting production, markets or technical development to the prejudice of consumers;

c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts".

11. For instance, supracompetitive prices set by the members of an oligopoly through some form of tacit coordination can be caught by article 86 (a), which notably prohibits unfair prices. However the Commission has so far never applied article 86 to a pure oligopoly situation.

12 . Cases T-68/89, T-77/89, T-78/89, *Società Italiana Vetro SPA, Fabbrica Pisana SPA and PPG Vernante Pennitalia SPA v. Commission,* (1992) ECR II-1403. This case concerned an appeal against a decision in which the Commission condemned three producers of flat glass for price fixing and quota allocating agreements contrary to article 85. In this decision, the Commission went on to condemn the glass producers for abuse of a collective dominant position. In particular, it found that by reason of the cartel agreement, the producers presented themselves on the market as a single entity; they had also established structural links relating to production through a systematic exchange of product. The Court rejected the Commission's approach on this point, in particular stating that the Commission had simply recycled the facts constituting an infringement of article 85. It then concluded that the Commission had not sufficiently proved the existence of a collective dominant position.

13. Cases T-24/93, T-25/93, T-28/93, *Compagnie maritime Belge Transport and others v. Commission,* (1996), ECR II-1201. That case concerned an appeal against a Commission decision condemning for abuse of collective dominance a number of shipping companies members of a shipping line. The Court again stated that in order for a collective dominant position to exist, the undertakings in question must be linked in such a way that they adopt the same conduct on the market. This may be the position where, as a result of the close relations which shipping companies maintain with each other within a liner conference, they are capable together of implementing in common on the relevant market practices such as to constitute unilateral conduct.

14 . Judgement of 25 March 1999 (Case T-102/96; Gencor/Commission, not yet reported, points 273 to 284)

15. This judgement was rendered in the context of an annulment action lodged by the French government against the Commission decision to clear conditionally the concentration between Kali und Salz, a subsidiary of BASF, and Mitteldeutsche Kali A. The Commission had come to the conclusion that the new entity on the one hand and the French State-owned company SCPA on the other, would enjoy a collective dominance position in the market for potash products in all community countries other than Germany, which was deemed a separate geographic market. The Commission view was based *inter alia* on the degree of post merger concentration (creation of a duopoly counting for 60 percent of the market in Europe), structural factors relating to the nature of the market and the characteristics of the product (homogeneous products, barriers to entry, mature market), and finally the existence of structural links between the

undertakings concerned. On this latter point, in particular, the Commission found that there were indications that there would be no competition between KS/MDK and SCPA because of their long standing commercial links, through a Canadian joint venture and a distribution agreement.

While accepting that the Merger Regulation applies the creation or the strengthening of a collective dominant position, the Court rejected the application of this test to the case at stake. In particular it considered that the structural links identified by the Commission in its decision were not sufficiently demonstrated. It thus concluded that the Commission had not established to the necessary legal standard that the concentration would give rise to a collective dominant position. However, the Court's annulment of the Commission decision on this point does not imply that the presence of structural links constitutes an essential condition for the Merger Regulation to apply to oligopolistic dominance. Case C-68/96.

16. In the past in its assessment of oligopolistic dominance, the Commisison has looked at concentration ratios. Useful indicator have been the two, three, four etc. firm concentration ratios. However, the Commission may also decided to use other concentration measures, if deemed useful in a particular case.

UNITED STATES

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1. Introduction to the Economics of Collusion

A. Incentives to Collude and the "Cartel Problem"

- Oligopoly markets are characterized by interdependencies among firms' fortunes. The consequences of firms' actions will depend, in part, on rivals' decisions.
- Economic theory generally assumes that firms recognize or perceive these interdependencies, leading to the potential for strategic behavior.
- Perceived interdependencies introduce a potential incentive to collude, since firms may earn higher profits if they coordinate behavior by pursuing joint profit maximization.
- While a collective incentive motivates collusion, strong private incentives motivate cheating by conspirators.
- Economists refer to this as the "cartel problem" or "prisoners' dilemma." Consider hypothetical profit opportunities for a pair of duopolists:

		Firm B	
		Collude	Cheat
Firm A	Collude	50, 50	30, 60
	Cheat	60, 30	40, 40

- If firms coordinate their actions to restrict output and attain the joint profit maximization through collusion, each receives a profit of $50. But if one firm expands production ("cheats") while the other adheres to the collusive output, the cheater earns $60 in profit while the other firm receives only $30. Finally, if both firms cheat by over-producing they each earn $40 in profit, the competitive rate.
- Clearly, the two firms are better off collectively if they collude. But there are inherent incentives for each to defect from collusion, since either firm could improve its own position by unilaterally cheating *if* it assumes that its rival will *not* cheat ($60 > $50). If each firm operates under this assumption, then the only equilibrium is that both firms cheat. Cheating yields the lowest joint profit ($80 < $90 <$100).
- Collusion is not inherently self-enforcing. Given mutual private incentives to cheat, firms must devote real resources to enforcement. Enforcement involves monitoring co-conspirators and meting out discipline when cheating is detected.
- Collusion also may attract entry in response to profit opportunities. The colluding firms must either forestall entry, or convince entrants to abide by the cartel's output restrictions.

Repeated Interaction

- The cartel problem may be alleviated when firms interact repeatedly. Specifically, the ability to *monitor* and *punish* may be enhanced in a repeated game.
  - *Monitoring* may become more accurate in repeated games because firms will have more frequent opportunities to gain wind of cheating by co-conspirators. If p is the probability that a firm learns of a "secret" price cut by one of its co-conspirators, then $1-(1-p)^n$ is the probability that at least one such cut is detected when price cuts are offered on n occasions. As n rises, the probability of detection also rises.
  - *Punishment* can be introduced. A cheating firm can be threatened with the loss of a stream of future collusive profits once it is detected. A common punishment strategy in collusion models is reversion to the non-cooperative price for a set time period. Assuming that firms do not discount future profits "too heavily," it becomes possible to sustain the collusive equilibrium by threatening such punishment.
- As an example, suppose that the duopolists discount future profits at a 5 percent rate of interest. If a firm abides by the collusive price forever, it earns \$50/(.05) = \$1,000 over its lifetime. Alternatively, if a firm cheats once, is then detected and henceforth punished, it earns \$60 + \$40/(.05)(1.05) = \$822 over its lifetime. Collusion thus dominates cheating (\$1,000 > \$822).
  - Implication: factors affecting monitoring costs and punishment credibility will influence the probability that firms will find collusion enforceable.

B. The Forms That Collusion May Assume

- Firms' choice of *how* to collude will depend both on the anticipated severity of the cartel problem, and on the risk of antitrust scrutiny associated with different methods of collusion.
- This presents an *inherent tension*: effective cartel enforcement requires transparency of participants' actions, while effective shielding of actions from antitrust authorities requires opaqueness. Colluding firms must balance these two goals.

i. Fixing Price

- Firms often will choose to do more than (or something other than) merely set a single common price. A price-fixing agreement will find it necessary to specify and monitor separate prices for every product grade and quality level. Firms also must agree on how to adjust these prices -- individually or uniformly -- as demand and supply conditions change in the industry.
- Even if firms successfully curtail price competition -- including both explicit price discounts and ex-post rebates or disguised quantity discounts -- they must still confront non-price cheating by members seeking to expand their sales through increased product quality, free after-sale servicing, expedited delivery and other bundled features.
  - Naked price fixing may also be visible to antitrust authorities.

ii. Bid Rigging

- Firms may rig bids by pre-selecting a winning firm who will submit the "low" bid while others submit artificially inflated losing bids. Pre-selected winner may be determined by a

rotation system among conspirators. Pre-selected losers may receive side-payments or sub-contracts.

- Firms may prefer bid rigging to price fixing for several reasons. First, policing may be easier. With bid rigging, the winning firm is observed directly and the winning price typically is announced; in some cases, losing bids are also disclosed. Hence, any "surprises" may reveal cheating by an identifiable firm. Second, because bid prices will vary across prospective suppliers and the identity of the successful bidder will vary over time (assuming a rotation system), bid rigging may be less prone to antitrust detection than the uniform pricing that results from simple price fixing.
- Froeb, Koyak and Werden (1993) estimate that 70 percent of criminal antitrust cases have involved bid rigging. Notably, a government agency was the purchaser in the bulk of these cases.

iii. Assigning Market Shares

- If colluding firms fix market shares, each firm moves along a demand curve that is a fixed proportion of the industry demand.
  - The individually profit-maximizing price thus coincides with the collectively profit-maximizing price. As long as firms can reliably observe market shares, enforcement will be perfect.
  - However, fixed market shares may be visible to antitrust authorities.
  - Moreover, if firms' underlying cost structures change unevenly over time, the cartel will be forced either to renegotiate its initial market share allocations or to devise an elaborate set of side payments to maintain discipline within its ranks.
  - Both tasks will generally require explicit ongoing communication among the parties, further raising the risk of antitrust detection.

iv. Customer Allocations

- Colluding firms may assign particular sets of buyers to each seller.
- Customer allocation or market division agreements sharply curtail the short run return to price cutting by making each seller essentially a monopolist with respect to a set of customers, and by simplifying the process of detecting instances of poaching upon others' customers.
- Long run incentives to undercut the cartel price will generally remain a problem, however, particularly if the buyers compete against one another downstream. If some of the cartel's customers can extract lower prices for their inputs, their market share will grow, which will tend to make the price cutters' long run demand curve more elastic than the industry demand curve. Moreover, entry by new customers and exit by old customers may cause current allocations of customers to become unstable.
- Notably, customer allocation agreements eliminate competition in service and product quality, as well as price.
- As with fixing market shares, customer allocation agreements may require periodic renegotiation or side payments among conspirators if demand does not grow uniformly across customer segments.
- While these agreements run a substantial risk of antitrust detection, Fraas and Greer (1977) and Posner (1970) found that one-quarter of criminal antitrust cases included market division

schemes, ranging from customer assignments to territorial divisions to product market assignments.

C. Collusion is More Than Mere Oligopoly Pricing

- Oligopolists sell in a market with "perceived interdependencies." Economists formalize this with reaction or best response functions. A firm's optimal price (or output) is a function of the firm's assumptions (or expectations) about how its rivals will price, and about how rivals' prices might change in response to the firm's own pricing decision.
- Based on the reaction it expects from rivals, each firm unilaterally selects the price that maximizes its own profits.
- Rational profit-maximizing behavior by oligopolists who merely take account of perceived interdependencies should not be construed as collusion; there is no agreement of any kind, only informed unilateral action.
- Treating oligopoly pricing as collusion would demand that competitors act irrationally by ignoring perceived interdependencies, i.e., that rivals should price as if they were in a perfectly competitive market.
- It would also mandate unworkable remedies. The root source of the supra- competitive pricing is the oligopoly structure rather than firms' rational behavior. The only potential remedies are a) direct price regulation or b) a structural deconcentration policy. Neither remedy is desirable.

i. A simple illustration

- Two gas stations (A and B) sell across the road from each other along an isolated stretch of highway. Currently, both stations charge $1 / gallon. The two stations are regarded by consumers as offering identical products. With each station pricing at $1, each expects to receive 50 percent of the business.
- Station A contemplates raising its price to $1.25 / gallon. The price hike would be profitable to A only if B matches the price, since otherwise all consumers will desert A in favor of B.
- At first glance, it appears risky for A to proceed with the price hike without some prior assurance (i.e., an explicit price-fixing agreement) that B will follow, since if the price hike is not matched, A will lose all the business.
- Suppose that A proceeds with the price hike anyway. If A raises its price, it will learn quickly whether B has followed -- either by observing the signs that communicate B's price to drivers, or by whether it experiences a sharp drop in sales (indicating that B has not matched). If B has not followed the increase, A can promptly restore its $1 price and suffer only a very transitory loss of business.
- Hence, A faces relatively little risk by initiating the price increase.
- Consider now Station B's options. If B decides not to match A's price hike, B could enjoy a period when it captures 100 percent of the sales. As explained above, A will quickly learn about B's decision and will retract the price hike. B's profit gains will thus be brief. Alternatively, if B chooses to match A's increase, it would forego the brief period of extra business in return for a long-run equilibrium in which it shares the market with A at the higher price $1.25.
- Unless B strongly discounts future profits, it has a unilateral incentive to match the price increase by A.

- Since A now expects that B will find it in its self-interest to follow, A can initiate the price increase with minimal risk.

ii. Questions

1) Are A and B tacitly colluding to price at $1.25? Or are they simply pricing in their own self-interest, factoring in their rival duopolist's expected best response?
2) What is it that A or B did that is objectionable?
3) How would we fashion a remedy against it?

- We can't argue that A should have ignored the fact that, given the market environment, B would likely match A's price hike. To argue this would be akin to requiring A to pretend that it operates in a perfectly competitive market rather than in a duopoly. I.e., to ignore the perceived interdependence between A and B.
- Similarly, we can't argue that B should not have matched A's price hike, i.e., that B should have ignored the fact that if B had <u>not</u> matched A would simply have rescinded the hike. Again, this would be akin to asking B to pretend it operates in a perfectly competitive market.
- If we deem A and B to be colluding, what remedy would we seek? The root source of the "undesirable pricing" is the duopoly industry structure rather than firms' behavior. The only potential remedies are a) direct price regulation or b) structural deconcentration to break apart the duopoly.

iii. Distinguishing Collusion From Mere Oligopoly Pricing

- How might economics be used to help distinguish collusion from oligopoly pricing?
- Several complementary approaches might be used, depending on the case at hand and availability of qualitative and quantitative information.
- One approach might inquire whether observed prices or outputs are inconsistent with models of non-cooperative behavior.

  A second approach might inquire whether firms are acting in ways that appear inconsistent with their unilateral self-interest as rational profit-maximizers.
- Both approaches are found in the empirical literature (eg., Slade (1987), Porter (1983), Baker (1989), Levenstein (1997)).
- Neither approach is fully attractive. There is an inexhaustible supply of non- cooperative oligopoly models which can be perturbed by changing assumptions about firms' choice among strategic variables, information structures, whether competition is one-shot or a repeated game, whether firms move simultaneously or sequentially, etc..
- A third approach, informed by Stigler (1964) and suggested by Posner (1976):
  a) Are industry conditions conducive to collusion? Or, are there *complicating factors* that may tend to hamper firms' efforts to a) reach a 'meeting of the minds,' b) detect deviations from the coordinated outcome, or c) punish those deviations? (See also Merger Guidelines Sec. 2.1)
  b) If complicating factors are present, can we identify *facilitating practices* which help overcome complicating factors? Facilitating practices reduce uncertainty about the rival's likely choice among strategies, or facilitate a quick response if the rival deviates from the joint monopoly price.

- Caveat: this approach can inform us about whether collusion is relatively more likely to occur in one market than in another, but it is silent on whether collusion is likely to be occurring in an *absolute* sense.

2. Overview of Legal Standards

A. Antitrust Laws and the Oligopoly Problem

- Antitrust law attempts to avert the consumer and societal welfare losses associated with concerted action among competitors by prohibiting firms from engaging in collusion, as well as discouraging the development of markets in which anticompetitive coordination might occur.
- Section 1 of the Sherman Act prohibits agreements that restrain trade, and thus can be used to attack active collusion, while Section 7 of the Clayton Act forbids mergers or acquisitions that substantially increase the risk of coordinated behavior. Together, these statutes provide a unified (though not comprehensive) approach to dealing with the oligopoly problem.[1]
- As noted above, collusion is distinct from mere oligopoly pricing (although the latter is arguably also a form of coordination), in part because we have no appropriate remedy for interdependent conduct arising from a concentrated market structure instead of an agreement and do not wish to discourage rational unilateral behavior.[2]
- Nonetheless, oligopoly pricing or other interdependent conduct is supracompetitive, resulting in welfare loss. Thus, section 7 properly prevents market consolidation that would result in (or strengthen already existing) oligopolistic conditions *if* firms in the market might find it profitable to coordinate, whether through interdependent conduct or active collusion. As Judge Posner has suggested, "a strong antimerger policy should do much to prevent new oligopolies from emerging and loosely oligopolistic industries from becoming tightly oligopolistic."[3]

B. Sherman Act §1

- Section 1 of the Sherman Act, 15 U.S.C. §1, prohibits "contract[s], combination[s] . . . or conspirac[ies]," that unreasonably restrain trade.
- A plaintiff in a section 1 action must establish the existence of an agreement between two or more parties from which unreasonable anticompetitive effects result.
- Courts recognize that "[o]nly rarely will there be direct evidence of an express agreement"[4] in such cases, and are willing to infer actionable collusion under section 1 from circumstantial evidence that the defendants arrived at and implemented some form of tacit understanding.[5]
- However, more than mere "conscious parallelism" or "interdependent behavior" must be established before an agreement will be inferred.[6] Plaintiffs must also be able to provide evidence that "'tends to exclude the possibility' that the alleged conspirators acted independently. . . . [I]n other words, [plaintiffs] must show that the inference of conspiracy is reasonable in light of the competing inferences of independent action or collusive action that could not have harmed [plaintiffs.]"[7] Evidence of this sort is commonly referred to by courts as a "plus factor."

C. Clayton Act §7

- Section 7 of the Clayton Act, 15 U.S.C. §18, prohibits mergers or acquisitions "where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly."
- It has long been settled that the incipiency nature of section 7's language affords courts the ability to block acquisitions that substantially increase the risk of harm to competition, even before such harm has occurred.[8]
- Thus, section 7 "necessarily requires a prediction of the [challenged] merger's impact on competition, present and future,"[9] and "deals in probabilities, not certainties."[10]
- The focus of section 7 inquiry is whether a proposed transaction creates an "appreciable danger"[11] of anticompetitive effects, regardless of whether those effects result from post-merger conduct that would be actionable under section 1 of the Sherman Act.[12]
- Accordingly, a merger that would substantially enhance the ability of firms in the post-merger market to engage in conscious parallelism, conduct that by itself is outside the scope of the Sherman Act, may be prohibited under section 7.[13]

3. Practical Requirements to Building a Case

A. Legal Burdens

- Section 1 and Section 7 each present distinct legal burdens and unique problems of proof for coordinated effects cases.
- Section 1 prohibits both express and tacit collusion, but not conscious parallelism. Accordingly, where direct evidence of a collusive agreement is not available, the plaintiff must be able to prove through circumstantial evidence that the defendants reached an agreement.
- In a section 1 case, the plaintiff must also show either that the agreement is *per se* illegal - anticompetitive effects are presumed given the nature of the conduct - or that it actually has or will have anticompetitive effects in a relevant market.
- Section 7 deals with mergers and acquisitions and has no separate requirement that an agreement be proved. Modern courts increasingly require plaintiffs to demonstrate in detail the increased danger that would result from a challenged transaction. The weight afforded the traditional presumption of illegality that is created by showing that a proposed merger would significantly increase market concentration has been substantially lessened.[14]
- In applying either statute, antitrust enforcers must be able to articulate a comprehensive theory of harm and support that theory with substantial evidence.

B. Collusion Under Sherman §1

- Section 1 collusion cases typically involve one of four scenarios:[15] 1) Defendants have allegedly entered into express collusive agreements about which direct evidence is available; 2) Defendants have allegedly entered into express (but covert) agreements about which no direct evidence is available; 3) Defendants have allegedly entered into tacit agreements about which only circumstantial evidence is available;[16] or 4) Defendants have coordinated their actions by doing little more than observing and anticipating the conduct of their rivals.

- In the first scenario, prosecution is relatively straightforward. Direct evidence, usually in the form of documents and/or testimony, proves that competitors agreed to eliminate competition in some meaningful sense, and the case becomes largely a matter of establishing appropriate damages and/or assessing effective punitive measures.
- The latter three scenarios present more difficult problems of analysis and proof. In each, the plaintiff must establish that an actionable agreement exists. While the first two scenarios (numbers 2 and 3 above) can pose difficult issues of proof, the third is likely to be unactionable as a matter of law.
- It is important to note that, going into a case, the plaintiff may have incomplete information regarding the form of coordination involved, and thus may not be in an immediate position to determine into which of the above categories its case falls.

i) Proof of an Agreement

- In the absence of direct evidence of an explicit agreement, a section 1 plaintiff must provide enough circumstantial evidence to warrant an inference that the defendants colluded, either expressly or tacitly. While courts are generally sympathetic to the difficulties in proving an agreement indirectly, they nonetheless require "evidence that reasonably tends to prove that [the defendants] had a conscious commitment to a common scheme designed to achieve an unlawful objective."[17]
- Stated another way, plaintiff's circumstantial evidence of agreement must "tend[] to exclude the possibility that the alleged conspirators acted independently."[18]
- Typically, to infer an agreement, plaintiffs must prove the existence of parallel conduct along with certain "plus factors" which tend to show that the conduct was the product of an anticompetitive scheme. The cases usually frame the question as whether the plaintiff provided sufficient evidence to allow a reasonable jury to infer an agreement.

Examples of Parallel Conduct and Plus Factors

Uniform conduct among competitors -- often called "conscious parallelism" -- can take any number of forms and may or may not be related directly to price. Examples include the publication and use of identical price lists, uniform discounts, lock-step price increases, identical use restrictions upon customers or distributors, adoption of uniform hours of operation, and uniform refusals to deal.

- Plus factors, i.e., those which tend to refute the notion that defendants were acting independently, also vary in form and effectiveness. They include evidence that a firm was acting against its unilateral self interest (i.e., that its conduct would only make sense as part of a collusive scheme); evidence showing that defendants were afforded substantial opportunities to collude (i.e., correspondence, meetings, other communications); or evidence that defendants' justification for the conduct was pretextual.
- A few case examples are summarized below:

  Interstate Circuit, Inc. v. United States, 306 U.S. 208 (1939). Eight motion picture distributors imposed identical restraints after receiving a letter from an exhibitor urging the conduct; the letter listed all eight defendants as addressees, so each distributor knew the other distributors were being urged to undertake the same conduct. Plus factor: The conduct was against each firm's unilateral self interest, and no firm provided an exculpatory reason for its behavior. "[W]ithout substantially unanimous action . . . there was a risk of substantial loss of business and goodwill . . . , but . . . with it there was the prospect of increased profits." *Id.* at 222.

In re Petroleum Prods. Antitrust Litig., 906 F.2d 432 (9th Cir. 1990), *cert. denied*, 500 U.S. 959 (1991). Reversal of District Court's grant of summary judgment for defendant major oil companies on charges that they had tacitly colluded to fix or stabilize prices to distributors. The Court of Appeals held that an inference of conspiracy could reasonably be drawn from combined evidence of an industry-wide "sawtooth" pattern of pricing (wherein prices would decline over a period of weeks only to be followed each time by a uniform return to original higher levels), defendants' advance publication and dissemination of price data, and defendants' pattern of contacts with one another. Plus factor: Defendants could offer little or no independent business justification for their facilitating practices (i.e., dissemination of price information and pattern of contacts) to rebut plaintiffs' evidence that their chief purpose was to communicate price information to competitors.

United States v. Airline Tariff Publishing Co., Civ. Action No. 92-2854 (GHR) (D.D.C. filed Dec. 21, 1992). Consent Decree settling charges that major airlines engaged in price fixing through a complex system of signaling and other facilitating practices that allowed participants to "trade" their acquiescence to higher prices in certain markets where competitors had significant shares for the acquiescence of those same competitors to higher prices in the participant's own preferred markets. Plus factor: Acquiescence to higher prices in a preferred market of a competitor would be against the participant's unilateral self-interest but for that competitor's reciprocal agreement to acquiesce in the participant's own preferred market.

F.T.C. v. Abbott Labs, 853 F. Supp. 526 (D.D.C. 1994). The Federal Trade Commission charged Abbott, one of three infant formula manufacturers bidding for the federally sponsored Women, Infants and Children (WIC) program contract in Puerto Rico with bid rigging in violation of section 5 of the FTC Act.[19] Bidders on the program had the option of submitting bids for an "open market" program (under which all bidders could participate in varying proportions), a "sole source" program (under which the winning bidder would be the sole source of formula to the program), or both. The FTC alleged that local Puerto Rico officials orchestrated a collusive bid among the three bidders designed to ensure that an "open market" system prevailed.[20] (The local officials preferred an open market system because it ensured that promotional "side payments" would be made by participating manufacturers directly to the local hospital system, rather than to the federal WIC program.) When Abbott Labs bid competitively for both the open market and sole source programs, and "won" based on its sole-source bid, Puerto Rico officials canceled the bid, and announced a second round of bidding. Abbott bid non-competitively on the second round (including a "no bid" on the sole source program), as did the other bidders. In a separate count against Abbott, the Commission alleged that it had provided information to competitors during the same bidding period with anticompetitive intent or without an independent legitimate business reason - the *Ethyl* standard - that broadcast to competing bidders the company's preference and intent to bid and support an open market rather than a sole source system in Puerto Rico. The complaint alleged Abbott's actions reduced uncertainty in the market, and that bids resulted in substantially higher prices. The Commission submitted evidence on the bid patterns, as well as on communications between Abbott and the Puerto Rico officials and between the Puerto Rico officials and Mead and Wyeth to show that the second round bids were collusive. Plus factors: In addition to direct evidence of agreement, the FTC argued that in the absence of an agreement Abbott, the first-round winner, would have risked losing the second round if it bid non-competitively and a sole source contract were awarded to another bidder. However, the court held that Abbott at least plausibly acted in its unilateral self interest, because it knew that Puerto Rico officials were determined to achieve an "open market" result, and could have mounted a substantial legal challenge to any award of a sole source contract to another bidder. Thus, it granted judgment to Abbott.

ii) Hierarchy of Evidence

In part because of the inherent difficulties associated with circumstantial evidence, tacit collusion can be extremely difficult to prove.[21]

- Although there is no absolute hierarchy of evidence for collusion cases, some generalizations can be made about the persuasiveness of different factors.[22] In addition to evidence of parallel conduct:
  - Direct evidence of a conspiracy (both documents and testimony) will be most persuasive. This evidence can conclusively establish the existence an agreement.
  - Evidence of practices by the defendants (such as information exchanges) that facilitate collusion can also be effective, particularly where the practices in question serve no important legitimate business purpose.
  - Indirect evidence that tends to prove that each defendant's conduct would not be in its own individual self-interest in the absence of an agreement can also be persuasive. Courts sometimes refer to this as evidence that the defendant's conduct lacked independent business justification.
  - Next is evidence that the defendants' stated reasons for their conduct were merely pretextual.
  - Finally, and least persuasive, is evidence that the defendants were exposed to opportunities to collude.

C. Coordinated Effects Under Clayton § 7

- The focus of section 7 is whether the proposed transaction may result in a substantial lessening of competition.
- The incipiency nature of the standard is necessarily predictive and thus doesn't require that the plaintiff prove to a certainty that anticompetitive effects will occur. Rather, the standard is whether the merger creates an unreasonable risk of anticompetitive effects.[23]
- Concerns about competitive harm can be categorized broadly as either unilateral effects concerns (i.e., fear that the merged entity will have the ability by itself to raise price and restrict output) or coordinated effects concerns (i.e., fear that the firms remaining in the market may find it profitable and feasible to coordinate).
- In thinking about whether a proposed merger or acquisition creates a substantial risk of coordination, it may be helpful to understand how market characteristics can affect the likelihood and form of coordinated interaction. Imagine a continuum (depicted below) on which at one end market characteristics make coordination extremely difficult, and thus unlikely. On the other end, the market is perfectly conducive to coordination, such that firms could be expected to act interdependently.

Mkt. Perfectly Conducive to Coordination	Mkt. Somewhat Conducive to Coordination	Mkt. Somewhat Unfavorable to Coordination	Mkt. Highly Unfavorable to Coordination
I----------I	----------I	----------I	----------I
No Agreement Necessary/ Interdependent Behavior Expected	Some Agreement Necessary/Tacit Collusion Workable	Extensive Agreement Required/ Express Collusion Needed/Coordination Increasingly Unlikely	

- In general, as markets become more concentrated, coordination becomes easier and thus more likely. A merger in a market that is already susceptible to coordination, or which makes a market substantially more susceptible, is likely to violate section 7.[24]
- However, concentration alone does not necessarily make a market conducive to coordination.[25] Whether a market is predisposed to such conduct depends upon the interaction of any number of factors affecting the ability and incentive of firms in the market to coordinate, detect deviations, and punish deviators. (These factors are discussed below in subsection B.)
- Modern courts increasingly recognize that concentration is but one factor, albeit an important one, in a competitive effects analysis.[26]
- Following the Merger Guidelines' approach,[27] courts (and enforcement agencies) typically try to determine whether the post-merger market is one that is susceptible to coordination and/or whether the merger substantially increases the risk for such behavior. Accordingly, plaintiffs in a section 7 action must be prepared to articulate a sound coordinated effects theory and to support that theory with evidence. This requires a thorough analysis of market concentration, susceptibility of the market to coordination, and likelihood of entry in response to oligopolistic conditions.
- Persuasive evidence might include: a) evidence of an already oligopolistic market structure, including instances of interdependence or "less aggressive" competition; b) evidence of prior conduct or ongoing price-fixing or other collusive conduct; or c) evidence that the proposed acquisition would remove a substantial impediment to coordination, such as by eliminating a maverick firm.[28]
- Among these categories, evidence of prior or current coordination is potentially the most persuasive.
- In sum, successful analysis (and pursuit) of coordinated effects merger cases will increasingly depend on the ability to integrate factual evidence with economic theory.

4. Complicating Factors and Facilitating Practices

A. Factors That May Complicate Collusion

- Can economic science predict where collusion is more likely to occur?
  Stigler (1964), Posner (1976) and subsequent authors have identified factors that may complicate reaching a meeting of the minds, or detecting and punishing deviations from the coordinated outcome.

- Anticipated complicating factors can be apportioned among demand, supply, and other. Among the more commonly cited factors are:

1. *Demand factors*

i. Elastic demand at the competitive price
ii. Large and sophisticated buyers
iii. Differentiated products
iv. Lumpy purchases
v. Volatile demand
vi. Demand booms

2. *Supply factors*

i. Low seller concentration
ii. Competitive fringe with elastic supply
iii. Ease of entry
iv. Cost asymmetries

3. *Other factors*

i. Absence of prior collusion
ii. One shot competition

- Invariably, some complicating factors will be present. However, this might not be fatal for three reasons. *First*, collusion need not be "perfect." Firms must only make the rational calculus that collusion is more profitable than independent pricing. *Second*, empirical analysis of where collusion arises (and persists) identifies some complicating factors as being more reliable predictors (see below). *Third*, firms may be able to adopt "facilitating practices" that help to offset or mitigate complicating factors.
- Theoretical discussions of complicating factors abound. Textbook summaries are found in Scherer and Ross (1990, chs. 7 and 8), Carlton and Perloff (1994, ch. 6), and Shughart (1997, chs. 10 and 11). See suggested readings section for citations to more detailed treatments.
- Empirical analysis of suspected / confirmed collusion has narrowed somewhat the list of anticipated complicating factors to a subset that appear to be reliable predictors of where collusion more frequently occurs.
- Cautionary note: studies vary widely by methodologies and samples. Sample selection concerns rarely are addressed explicitly (see Posner (1970), Asch and Seneca (1976) and Dick (1996) for discussions).

Demand Factors	Supporting Evidence	Opposing Evidence
Elastic demand at the competitive price	Eckbo (1976), Marquez (1992)	
Large and sophisticated buyers	Dick (1996), Dick (1997)	
Differentiated products	Hay and Kelley (1974), Dick (1996), Dick (1997), Asch and Seneca (1975), Jacquemin et al (1981), Fraas and Greer (1977)	
Lumpy purchases	Hay and Kelley (1974)	
Volatile demand	Suslow (1988), Dick (1996)	
Demand booms	Jacquemin et al (1981), Palmer (1972)	Dick (1997), Suslow (1988), Dick (1996), Asch and Seneca (1975)

Supply Factors	Supporting Evidence	Opposing Evidence
Low seller concentration	Hay and Kelley (1974), Dick (1997), Eckbo (1976), Marquez (1992) (1976), Palmer (1972), Fraas and Greer (1977)	Asch and Seneca (1975), Jacquemin et al (1981)
Competitive fringe with elastic supply	Eckbo (1976), Griffin (1989)	
Ease of entry	Dick (1997), Eckbo (1976), Asch and Seneca (1975)	
Cost asymmetries		Eckbo (1976), Fraas and Greer (1977)

Other Factors	Supporting Evidence	Opposing Evidence
Absence of prior collusion		Dick (1997)
One shot competition	Asch and Seneca (1975)	

1. *Practices That May Facilitate Collusion*

- Certain practices might mitigate (some) factors complicating collusion.
- Facilitating practices are intended to address three sets of problems:

i. Reaching a 'meeting of the minds'

a. Cheap talk and focal points
b. Basing point pricing

ii. Detecting deviations

a. Information sharing
b. Meet-the-competition clauses

iii. Punishing deviations

a. Most-favored-customer clauses
b. Multi-market contacts
c. Partial ownership of rivals

Notes: Each of the practices may be consistent with either collusion or non- cooperation. A case-by-case evaluation is required.

i. Reaching a 'Meeting of the Minds'

a. Cheap Talk and Focal Points

- Complicating factor: When oligopolists interact on an ongoing basis (repeated games), multiple equilibria frequently exist. Firms' profits may differ across equilibria. How can firms signal to rivals which equilibrium to pick?

  Firms might signal the high-profit equilibrium to one another through "cheap talk," such as pre-announcing price.
- Providing rivals with advance notice of intended prices may allow time to gauge rivals' willingness to respond. It may also allow time for adjustments if necessary.
- Three caveats:

  1) Cheap talk can facilitate identifying the terms of coordination, but since 'talk is cheap' it cannot inject credibility into firms' responses. Nor can it facilitate monitoring or punishment for deviations from the focal price.

  2) Cheap talk can signal intentions at potentially lower cost of foregone business than directly implementing price changes. But, some costs may be unavoidable. If buyers are privy to cheap talk, pre-announcing price increases will induce stockpiling of storable goods, cutting into expected sales at the higher price.

  3) Cheap talk is most useful when firms have similar interests, so that firms seek merely to signal their intentions. But when cheating threatens collusion, cheap talk may offer little assistance for reconciling private and collective incentives.

For details, see Farrell (1987) and Farrell and Rabin (1996).

Examples of cheap talk:

- *Airline Tariff Publishing* (1994) consent decree on computer ticketing system. Eight major airlines alleged to have signaled their pricing intentions to each other in non-binding fare quotations through the ATP system.
- DOJ alleged that the airlines used cheap talk to propose quid pro quos: "if X raises fares on routes into one of Y's hubs, Y will raise fares into X's hubs."
- DOJ alleged that airlines "react[ed] to each other's messages and attempt[ed] to reach a consensus" by "exchang[ing] mutual assurances concerning the level, scope and timing of fare changes." Evidence that fares were higher and fare discounts less common in many city pairs.
- *Ethyl Corporation v. Federal Trade Commission* (1984). Manufacturers of gasoline additives announced price increases 30 days in advance. FTC alleged that pre-announcements gave

rivals opportunity to respond and lessened uncertainty about whether rivals would follow before the price change went into effect.

- Second Circuit rejected FTC argument, requiring there to be evidence of anticompetitive intent or absence of an independent business rationale for practice.

  Empirical studies: Gillespie (1995) and Hay (1994).

- A variant is *focal points*. Merger Guidelines (Sec 2.11) recognize that "[f]irms 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." (Recall the earlier discussion on the methods of collusion.)
- A focal rule can standardize firms' practices. Having adopted a focal point -- e.g., preserve existing price differentials or existing market shares -- identifying a specific focal point (i.e., a specific oligopoly equilibrium) -- may require only communicating a single parameter -- e.g., the size of the common percentage price increase or common percentage output reduction.

Examples of focal points

- *United States v. General Electric* (1977): DOJ alleged that GE and Westinghouse used a pricing manual that specified prices for individual components and features of complex machinery, formulas for calculating prices, and illustrations of how the formulas would be applied in specific transactions. DOJ alleged that the pricing manuals enabled the firms to predict the types of machines on which their rival would bid, and the price it would offer by applying the 'focal formulas'.
- *NASDAQ* (1996): DOJ alleged that major securities firms relied on a "quoting convention" to deter price competition among market makers in their trading of NASDAQ stocks. Convention required market makers to avoid quoting odd-eighths, thereby creating a minimum price spread of 25 cents and producing higher sales commissions.

  Empirical studies: Christie and Schultz (1994) and Godek (1996).

b. Basing Point Pricing

- Complicating factor: Sellers and buyers may be geographically dispersed, and transportation costs may be significant. Final prices to buyers could vary widely. How might firms reach a 'meeting of the minds' on price?
- Basing point systems involve sellers who produce at geographically disparate locations pricing according to a common delivered price schedule, i.e., the buyer's price is inclusive of transportation costs and is uniform regardless of the actual distance between the seller and the buyer. Typically, a major production center is designated as the "basing point."
- Delivered pricing formulas remove transport cost variables from the pricing structure, thereby potentially simplifying each producer's price format.
- A rival doesn't have to identify and match hundreds of buyer-specific prices. It need only observe and match the uniform delivered price regardless of where the various firms' buyers are located.
- Basing points also assist in monitoring against price deviations, by simplifying the calculus of whether cheating is occurring. Firms must still deduce adherence to the base price, but they no longer have to calculate backwards from buyer prices to deduce whether there is adherence to a common FOB price.

- Caveat: Basing-point pricing illustrates the difficulty of deducing collusion by inferring whether practices are in firms' unilateral self-interest. Basing-point pricing (and associated practices such as freight absorption and cross-hauling) are consistent with either competitive or collusive behavior by firms. See *Ethyl* below.

For details, see Haddock (1982).

Example of basing point pricing:

- *Ethyl Corporation v. Federal Trade Commission* (1984). Manufacturers of a gasoline additive quoted delivered prices. Delivered prices were the same regardless of the refinery's actual location. FTC alleged that the practice facilitated price collusion by standardizing pricing practices.
  - Second Circuit disagreed, noting that *Ethyl* used basing point pricing long before rivals entered the industry. Customers apparently demanded a delivered price to require manufacturers to retain responsibility and liability for the volatile compounds during transit to the refiner's plant. Court reasoned that collusion should have been possible without basing points, whereas competition among manufacturers of fungible goods would imply use of basing points.

  For details, see Hay (1994).

ii. Detecting Deviations From the Coordinated Outcome

a. Information Sharing

- Complicating factor: Imperfect or incomplete information can impede a collusive agreement in two ways. First, when firms have divergent views about demand conditions, they will find it harder to reach an agreement on price. Second, if an agreement is reached, it will be harder to sustain. Detection of cheating is more difficult, because diversion of sales through price-cutting can less reliably be distinguished from a market-wide downturn in demand.
- Exchanging information among competitors may facilitate reaching and enforcing a collusive agreement by lessening uncertainty. Detection becomes more reliable, thereby reducing the expected return to deviating.

  Cason (1994) found experimental evidence that information exchange may stabilize collusion. However, his findings lacked robustness. For example, Cason found that information sharing facilitated collusion when firms faced cost uncertainty, and were producing complementary goods. But Cason found no evidence that information sharing promoted collusion when firms instead faced uncertainty about demand conditions and when they were producing substitutes.
- Caveats: Information sharing can also occur among non-cooperating rivals. Some types of shared information are likely more effective for sustaining collusion. Effectiveness depends on credibility, speed of transmission, aggregation, scope, dating and industry coverage. Few general conclusions can be offered. A case-by- case analysis is required.
- DOJ and FTC Health Care Guidelines indicate that an exchange of price information is unlikely to be anticompetitive if a) it takes the form of a written survey, b) is managed by a third party, c) complies information at least 3 months old, and d) is presented in an aggregated format.

For details, see Kuhn and Vives (1995) and Malueg and Tsutsui (1997).

Example of information exchange

- *United States v. Container Corp of America* (1969). Manufacturers of corrugated cardboard boxes informally exchanged information about recent prices to specific customers.
- The Court concluded that there was an expected quid pro quo among firms: each shared information only in the expectation that it would receive reciprocal information. This is important, because one-way information sharing can be in firms' unilateral self-interest (Kuhn and Vives (1995)).
- Empirical studies: Cason (1994) and Doyle and Snyder (1996).

b. Meet-the-Competition Clauses

- Complicating Factor: When firms sell to many buyers, it may be difficult to detect (all) instances of price undercutting.

  By adopting a meet-the-competition clause in its contracts with buyers, a seller guarantees to prospective buyers that if another firm offers a lower price, the seller will match it or release the buyer from its contract.
- The clause can hinder cheating by lowering the cost of monitoring rivals' prices. Buyers receive a financial inducement to search for price deviations and to report them to sellers.
- Caveat: Meet-the-competition clauses may not facilitate collusion when buyers must incur "hassle costs" to effectuate their seller's price-matching guarantee.

  For details, see Salop (1986) and Hviid and Shaffer (1997).

iii. Punishing Deviations From the Coordinated Outcome

a. Most-Favored-Customer Clauses

- Complicating Factor: Cheating on a collusive price may be profitable in the short term until deviations are detected and punished by rivals.
- With a most-favored-customer clause, a seller promises to give its customers the benefit of any lower price that the seller extends to another customer.
- The promise could facilitate collusion in two ways.
- First, it can reduce uncertainty about rivals' transaction prices, and allow firms to track just one or two buyers' prices to monitor all rivals' prices reliably.
- Second, it can reduce the net return to deviating from the joint monopoly price because the firm cannot discriminate among buyers to selectively offer price concessions to attract additional sales.
- Caveat: Most-favored-customer clauses have well recognized efficiencies. They can introduce desirable price flexibility into long-term contracts to allow efficient adaptation of terms without opening the door to unconstrained opportunism.

  For details, see Salop (1986) and Goldberg (1991).

Examples of Most-Favored-Customer Clauses:

- *United States v. General Electric* (1977). DOJ cited as a facilitating practice GE and Westinghouse's price protection plans which promised to electric turbine buyers that if any one received a discount, all buyers from the past 6 months would receive the same discount retroactively. DOJ threatened suit and the firms abandoned the practice.
- *Ethyl Corporation v. Federal Trade Commission* (1984). FTC alleged that Ethyl and three rival manufacturers of gasoline additives used the clauses to discourage secret discounts. Second Circuit rejected FTC's argument, noting that customers publicly sought contractual protection against discrimination. As with basing point pricing, Ethyl also had used the clauses before rivals' entry. Rivals adopted a corresponding clause when they entered.
- Empirical studies: Crocker and Lyon (1994) and Grether and Plott (1984).

b. Multi-Market Contact

- Complicating factor: The maximum punishment that firms can impose on a cheating firm (e.g., reverting to the competitive price in the affected market) may be inadequate to deter cheating.
- Firms may be more likely to engage in mutual forbearance when they interact across many product or geographic markets.
- Collusion may be supportable in some markets and not in others. In some markets, there may be 'slack' in firms' incentive constraints, i.e., the maximum possible punishment is more than sufficient to enforce collusion. Multi-market contacts can act to pool incentive constraints across markets by transferring 'slack' from a market where collusion is viable to another market where collusion otherwise would not be viable.

For details, see Bernheim and Whinston (1990).

Multi-Market Contact Example

- *Airline Tariff Publishing* (1994): DOJ alleged that "Increased prices desired by some airlines are exchanged for increases desired by others in different markets. Often such trades involve hubs. Each airline tends to prefer higher fares on routes to or from its hub cities, where it tends to have high market shares and generate the highest profits. Thus, an airline may be willing to raise fares above its most preferred fare on others' hub routes in order to ensure that those airlines charge the higher fares it desires on its own hub routes."
- When an airline acquiesced to the joint monopoly price in another airline's hub market -- and thereby accepted something less than individual profit maximization in that market -- it received an implicit side payment of a joint profit maximization fare in its own hub market that would not otherwise have been sustainable.
- Empirical studies: Gillespie (1995) and Scott (1982).

c. Partial Ownership of Rivals

- Complicating Factor: Heterogeneity among rivals may frustrate collusive agreements. Conjecture is that cross-ownership among rivals creates greater similarity of interests, and thereby facilitates collusion.

- Whether partial ownership facilitates or hinders collusion depends on industry demand conditions. Cross ownership has two effects: first, it reduces the gain from cheating on a collusive agreement (since some of the gains accrue to rivals by dint of their ownership stake in the cheater). Second, it softens the punishment that would follow cheating (since some of the penalty is borne by rivals by dint of their ownership stake in the punished firm). The first effect makes collusion more likely, while the second makes it less likely.

For details, see Malueg (1990), Reitman (1994).

Partial Ownership Example

- Empirical examples appear sparse, which by itself may be informative.
- Alley (1997) studied the effects of partial cross ownership on the propensity for collusion in the U.S. and Japanese automobile industries. No clear-cut findings.

5. Conclusions

A. Gauging the Deterrence Effect of Antitrust

- Economic empirical analysis has sought to gauge the size of the deterrence effect from antitrust on collusion. These studies have generally adopted two approaches: analyzing stock price movements surrounding antitrust enforcement events, or comparing prices pre- and post-collusion.
- The studies have provided a range of estimates that may be viewed as economically significant. These estimates may understate the actual deterrence effect, to the extent that (for reasons alluded to earlier) "weak" conspiracies may be more susceptible to antitrust detection.
- Bosch and Eckard (1991) analyzed stock price reactions to antitrust indictments against 127 firms. They estimated a present value of nearly $2 billion in cartel profits that were lost by the firms when their conspiracies dissolved.
- Similar analyses have been carried out in the bread industry (Block, Nold and Sidak (1981)) and in the electrical equipment industry (Block, Nold and Sidak (1981)).
- Christie, Harris and Schultz (1994) estimated that bid-ask spreads for NASDAQ stocks subject to the even-eighths trading rule fell by 40 percent after academic research on the conspiracy received extensive press coverage.
- Froeb, Koyak and Werden (1993) examined a bid rigging conspiracy against a government agency purchasing frozen seafood. Comparing the path of actual bid prices against a prediction of prices that would have prevailed in the absence of the conspiracy, the authors estimated that collusion raised prices by approximately 23 percent.
- Dissenting views: McCutcheon (1997) contends that the Sherman Act may facilitate collusion by raising the cost of renegotiating agreements among conspirators. Sproul (1993) contends that prices often rise following detection of alleged price-fixing conspiracies, though concerns have been raised about Sproul's methodology and data.

B. The Effect of Developments in Economics on Legal Standards for Collusion

- Advancements in economic theory have led to more sophisticated analyses of coordination cases under both section 1 of the Sherman Act and section 7 of the Clayton Act.
- In section 1 cases, courts are undertaking a more rigorous review of the distinctions between interdependent conduct and active collusion.

- In section 7 cases, court are increasingly moving beyond concentration-based presumptions and into more detailed accounts of market dynamics in order to better determine whether a proposed merger is actually likely to increase competitive risk.
- However, there is still room for analytical improvement. Explanations of so-called "plus factors" continue to be somewhat opaque, and would benefit from a more rigorous analysis. Moreover, new developments in game theory may help to increase our understanding of when (and in which markets) coordination is likely.
- For legal practitioners involved in cases under either section 1 or section 7, it has become increasingly essential to understand and embrace a sound economic theory of coordination that is supported by evidence.

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Note: The majority of the referenced sources are non-technical. Relatively more technical sources are identified with an asterisk in the margin (*).

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NOTES

1. Collusion may also be prosecuted under section 2 of the Sherman Act, 15 U.S.C. §2, which prohibits conspiracies to monopolize, as well as under section 5 of the FTC Act, 15 U.S.C. §45, which allows the Federal Trade Commission to sue to enjoin unfair methods of competition. This outline is limited to discussion of Section 1 of the Sherman Act and section 7 of the Clayton Act, the statutes most commonly used by the Division in collusion cases.

2. See, e.g., Clamp-All Corp. v. Cast Iron Soil Pipe Institute, 851 F.2d 478, 484 (1st Cir. 1988) (Breyer, J.) (finding that oligopoly pricing does not violate section 1 of the Sherman Act, "not because such pricing is desirable (it is not), but because it is close to impossible to devise a judicially enforceable remedy for 'interdependent' pricing. How does one order a firm to set its prices without regard to the likely reactions of its competitors?"). (Emphasis in original.).

3. Richard A. Posner, Oligopoly and the Antitrust Laws: A Suggested Approach, 21 Stan. L. Rev. 1562, 1566 (1969)..

4. Local Union No. 189, Amalgamated Meat Cutters v. Jewel Tea Co., 381 U.S. 676, 720 (1965) (Goldberg, J., concurring in part and dissenting in part). See also, e.g., Todorov v. DCH Healthcare Auth., 921 F.2d 1438, 1456 (11th Cir. 1991) ("only in rare cases . . . can a plaintiff establish the existence of a section 1 conspiracy by showing an explicit agreement"); In re Petroleum Prods. Antitrust Litig., 906 F.2d 432, 439 (9th Cir. 1990) ("direct evidence will rarely be available"), cert. denied, 500 U.S. 959 (1991).

5. See, e.g., ES Dev., Inc. v. RWM Enters., 939 F.2d 547, 553-54 (8th Cir. 1991) ("it is axiomatic that the typical conspiracy is 'rarely evidenced by explicit agreements,' but must almost always be proved by 'inferences that may be drawn from the behavior of the alleged conspirators'") (quoting H.L. Moore Drug Exch. v. Eli Lilly & Co., 662 F.2d 935, 941 (2d Cir. 1981), cert. denied 459 U.S. 880 (1982)).

6. See, e.g., Theater Enterprises v. Paramount Film Distributing Corp., 346 U.S. 537 (1954) (holding that parallel behavior alone is insufficient to prove a section 1 conspiracy); Wallace v. Bank of Bartlett, 55 F.3d 1166, 1168 (6th Cir. 1995) ("[P]arallel pricing, without more, does not itself establish a violation . . . Courts require additional evidence which they have described as 'plus factors'") cert. denied, 116 S.Ct. 709 (1996).

7. Matsushita Electrical Industrial Co. v. Zenith Radio Corp., 475 U.S. 574, 588 (1986) (quoting Monsanto Co. v. Spray-Rite Service Corp., 465 U.S. 752, at 764 (1984)). The Court noted earlier in its opinion that to have standing under the antitrust laws the plaintiffs/respondents needed to allege injury both to competition and to themselves. Id. at 583 (comparing Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., 429 U.S. 477, 488-89 (1977)).

8. See, e.g., Brown Shoe Co. v. United States, 370 U.S. 294 (1962); United States v. Philadelphia National Bank, 374 U.S. 321 (1963); Federal Trade Commission v. Proctor & Gamble, 386 U.S. 568 (1967).

9. Federal Trade Commission v. Proctor & Gamble, 386 U.S. 568 (1967). See also, e.g., Brown Shoe Co. v. United States, 370 U.S. 294 (1962); Hospital Corp. of America v. FTC, 807 F.2d 1381, 1389 (7th Cir. 1986) ("[a]ll that is necessary is that the merger create an appreciable danger of [anticompetitive] consequences in the future. A predictive judgment, necessarily probabilistic and judgmental rather than demonstrable, is called for"), cert. denied, 481 U.S. 1038 (1987) (citation omitted); FTC v. Staples, 970 F. Supp. 1066 (D.D.C. 1997).

10. Brown Shoe, 370 U.S. at 323.

11. Hospital Corp.of America v. FTC, 807 F.2d 1381, 1389 (7th Cir. 1986), cert. denied, 481 U.S. 1038.

12. See, e.g., United States v. Penn-Olin Chem. Co., 378 U.S. 158, 170-71 (1964) ("The grand design of the original §7 . . . was to arrest incipient threats to competition which the Sherman Act did not ordinarily reach").

13. Philadelphia National Bank, 374 U.S. 321 (1963); Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 227-230 (1993) (stating that "oligopolistic price coordination or conscious parallelism, . . . [is] not in itself unlawful" but noting that "[i]n the §7 context, it has long been settled that excessive concentration and the oligopolistic price coordination it portends, may be the injury to competition the Act prohibits").

14. See generally, ABA Antitrust Section, Antitrust Law Developments (Fourth) 326-327 (4th ed. 1997) ("Courts have been more receptive than in the past to non-market share evidence that bears on 'the ultimate issue [of] whether the challenged transaction is likely to facilitate collusion,' and they are more likely than in the past to give controlling weight to evidence that firms will not be able to raise prices notwithstanding high shares.") (Citations omitted.).

15. See William E. Kovacic, The Identification and Proof of Horizontal Agreements Under the Antitrust Laws, 38 Antitrust Bull. 5 (1993).

16. In this respect, tacit collusion refers to a conscious agreement requiring the active participation of a group of conspirators, but which is effected through less than express means (such as signaling conduct or exchanges of sensitive business information).

17. Monsanto Co. v. Spray-Rite Service Corp., 465 U.S. 752, 768 (1984).

18. Matsushita Electrical Industrial Co. v. Zenith Radio Corp., 475 U.S. 574, 588 (1986) (quoting Monsanto).

19. Section 5 of the FTC Act, 15 U.S.C. §45(a), prohibits "unfair methods of competition." The FTC has no independent authority to sue under the Sherman Act.

20. The other bidders, Mead and Wyeth, settled with the FTC.

21. See, e.g., Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 227-29 (1993) (demonstrating the difficulties of proving tacit collusion). See also, e.g., Jonathan B. Baker, Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory, 38 Antitrust Bull. 143 (1993) (suggesting that as we learn more about interdependent (non-collusive) behavior, it becomes more difficult to prove tacit collusion).

22. See generally ABA Antitrust Section, Antitrust Law Developments (Fourth) 10-14 (4th ed. 1997), for a discussion of the persuasiveness of various evidentiary factors.

23. See, e.g,, United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 362 (1963); Hospital Corp. of America v. FTC, 807 F.2d 1381, 1389 (7th Cir. 1986), cert denied, 481 U.S. 1038 (1987) ("appreciable danger" standard); FTC v. University Health, 938 F.2d 1206, 1218 (11th Cir. 1991) (government must show "reasonable probability" that the proposed transaction would substantially lessen competition in the future).

24. Indeed, if the post-merger market is perfectly conducive to coordination one might predict not only that the transaction "may tend substantially to lessen competition," (the section 7 standard) but that post-merger coordination (in the form of interdependent behavior) is actually more likely than not to occur.

25. See, e.g., Richard A. Posner, Antitrust Law, An Economic Perspective 56 (1976) ("No responsible economist would claim today that concentration was the only factor predisposing a market to collusion."); Richard A. Posner and Frank Easterbrook, Antitrust Cases, Economic Notes and Other Materials 41-43 (2d ed. Supp. 1984) ("[w]e must be very cautious of claims that concentrated markets are not competitive markets").

26. While courts continue to apply a presumption of illegality based on concentration statistics, they appear to be increasingly inclined to require additional evidence of potential harm and/or to allow the presumption to be overcome by evidence that firms will be unable to raise prices post-merger. See, e.g., United States v. Baker Hughes, 908 F.2d 981 (D.C. Cir. 1990) (finding that low barriers to entry made a post-merger price increase unlikely even in concentrated market); United States v. Waste Mgmt., Inc., 743 F.2d 976 (2d Cir. 1984) (same). But see, e.g., United States v. Rockford Memorial Corp., 898 F.2d 1278 (7th Cir. 1990) (upholding the presumption where "[t]he government showed large market shares in a plausibly defined market in an industry more prone than many to collusion"); FTC v. Cardinal Health, Inc., Civ. Act. No. 98-595 (D.D.C. July 31, 1998) (upholding presumption where government met "ultimate burden of persuasion" by, inter alia, introducing evidence that defendants could already coordinate pricing and that merger would result in "rationalization" of prices).

27. Federal Trade Commission and Department of Justice Joint Horizontal Merger Guidelines (1992). Section 2.1 of the Guidelines sets forth a basic framework for assessing the conduciveness of the market to coordination based on the ability of firms to reach terms of coordination, detect deviations from those terms, and punish deviators.

28. For a discussion of "maverick" firms and the implications of their elimination through merger, see Jonathan B. Baker, Two Sherman Act Section 1 Dilemmas: Parallel Pricing, the Oligopoly Problem, and Contemporary Economic Theory, 38 Antitrust Bull. 143, 199-207 (1993.).

AIDE-MEMOIRE OF THE DISCUSSION

The **Chairman** noted the high degree of interest in the topic evidenced by the receipt of fourteen delegation contributions. Many of those dealt with both the behavioural and structural tools available for dealing with problems posed by oligopolies. The Chairman decided to divide the Roundtable into two parts corresponding to those two sets of tools.

1. Behavioural Tools

The Chairman commented that behavioural tools found in abuse of dominant position or cartel provisions are not very easy to apply to oligopolistic problems mainly because of difficulties in proving the existence of tacit agreements. There is also the issue in some countries of how to establish collective or joint dominance.

The Chairman noted that the European Commission submission extensively discussed the applicability of Articles 85 and 86 to oligopolistic behaviour. He recalled the judgement in the *Wood Pulp* case that established that parallel behaviour by itself does not constitute a concerted practice under Article 85. Such parallelism can be regarded as proving the existence of an agreement or concerted practice only in cases where consultation and not the oligopolistic structure of a market constitutes the only plausible explanation of parallel behaviour. He asked the European Commission to comment on the standard of proof required to establish that, and invited a comparison between *Wood Pulp* and *Fiatagri*.

Regarding the applicability of Article 86 to oligopolistic behaviours, the Chairman alluded to the difficulties surrounding the notion of collective dominance. He believed that the few cases of collective dominance judicially reviewed by the EC courts involved economic links of a structural nature among the undertakings concerned. The *Gencor/Lonrho* decision appears to have changed the significance of such structural links. The Chairman left the Commission with two further questions. In cases involving oligopolies, to what extent can one substitute Article 86 for Article 85; and does the *Gencor/Lonrho* decision contradict what the EC said in its written contribution about the need for economic links of a structural nature in order to establish joint dominance?

A delegate from the **European Commission** noted that the Commission considers Article 85 to be an insufficient legal basis to control oligopolies. The European Court of Justice (ECJ) stated in *Wood Pulp* that oligopolistic behaviour, i.e. tacit collusion or parallel behaviour on the market, is actually a defence against the implementation of Article 85. In other words, whenever companies can show that their parallel behaviour on the market is due to the structural features of the market, the ECJ would not imply the existence of a concerted practice. Consequently, Article 85 has a very limited application to solving problems associated with oligopoly. A recent case, however, appears to suggest an increased ability to apply it to restrict exchanges of information which could facilitate collusion.

The most interesting latest developments in community law relate more to Article 86 than to Article 85. The early judgements of the ECJ, particularly in *Hoffman La Roche*, indicated that Article 86 would not apply to pure oligopoly situations. But there was an evolution on this point. Basing itself on the wording of Article 86, which clearly refers to the possibility of an abuse by one or more undertakings, the

Commission never gave up the possibility of applying Article 86 to situations of collective dominance. The Commission applied the theory of collective dominance for the first time in *Italian Flat Glass*. Although the Court subsequently quashed most of the Commission's decision, it accepted the principle that Article 86 could be applied in situations of collective dominance whenever the parties holding a collective dominant position shared "economic links".

After *Italian Flat Glass* a debate began as to what constituted "economic links". Two schools of thought developed. One insisted on a narrow interpretation, i.e. Article 86 could be applied only when the economic links were of a structural character. The Commission in its Kali and Salz merger decision applied that point of view. Although it quashed that decision, the ECJ endorsed the view that oligopolies can be tackled under the merger regulation whenever there are structural links.

The other school of thought was that the concept of "economic links" is not be limited to situations of clear-cut structural links between the parties, but extends as well to situations of parallel behaviour based on the structure of the market. This was further developed by the Commission but in the context of merger control rather than application of Article 86. Essentially, *Hoffman La Roche* was still considered a significant obstacle to applying Article 86 to oligopolies, along with a number of reasons outlined in the Secretariat's background paper (i.e. chiefly the difficulty of fashioning an appropriate remedy). However, in its recent *Gencor/Lonrho* decision, the Court of First Instance (CFI) held that under both Article 86 and the merger regulation, collective dominance could arise not only where there are structural links but also in a situation of pure oligopoly. In reaching this conclusion, the CFI interpreted its own decision in *Italian Flat Glass*. "Economic links" were interpreted to include situations where oligopolists recognise their common interest in behaving anti-competitively etc.. This means that, from a purely legal point of view, the Commission could rely on Article 86 to address problems of abusive behaviour by a pure oligopoly, i.e. where there are no structural links.

The Commission has not had sufficient time to reflect on the implications of an expanded Article 86. It recognises the already mentioned difficulties regarding devising suitable remedies for abusive oligopolistic behaviour. Price control seems the most obvious, though somewhat problematic remedy. The Commission has made some use of it in a number of single dominance cases.

The delegate did not believe there is any inconsistency between *Gencor/Lonrho* and past Commission decisions. In a number of annual competition reports, the Commission has stated that there is nothing in the wording of Article 86 preventing it from controlling abusive behaviour in the context of oligopoly. The Commission's position in *Gencor/Lonrho* was precisely that *Italian Flat Glass* was in no way incompatible with controlling abusive pricing by oligopolies.

The **Chairman** observed that the Norwegian delegation's contribution adds an important twist to the question of evidence in cases of oligopolistic behaviour. If the Norwegian Competition Authority considers that an infringement has taken place there are two procedures available: criminal and civil. It stresses that the standards of proof may not be the same under the two procedures and that circumstantial evidence might be more easily accepted in civil proceedings. Yet the Norwegian contribution states that only criminal procedures have been used so far. If the criminal procedure is more difficult to use and the civil approach is neglected, does this mean, enquired the Chairman, that the prospects for eliminating oligopolistic practices are remote under the Norwegian Competition Act?

A **Norwegian** delegate emphasised that his country's written submission is limited to discussing horizontal agreement prohibitions. Norway does not have a prohibition comparable to Article 85 of the EEC treaty. There are only prohibitions against price fixing, bid rigging and market sharing agreements. In addition the Competition Authority has a general right to intervene against other kinds of anti-competitive behaviour. As the Chairman mentioned there are two routes that can be followed. Following

the criminal route could lead to fines (for both individuals and enterprises) and imprisonment. Under the civil approach, parties can be required to repay illicit gains. The reason for exclusive dependence so far on the criminal route is that the cases that have arisen have all involved substantial documentary or testimonial evidence. Another reason is that under the civil approach, the Competition Authority has the burden of establishing the gain associated with an infringement, and this can be very difficult to do. It is worth noting that the Authority is currently working on some civil cases in order to clarify just what constitutes a concerted practice. The delegate also noted in passing that there are considerable legal and economic difficulties in relying on circumstantial evidence to prove some form of collusion.

At this point, the **Chairman** turned to the Australian contribution noting in particular some amendments made in 1986 to the Trade Practices Act's section 46. Prior to the amendments, section 46 was applicable only to monopolists or firms with considerable market dominance. This made it very difficult to tackle oligopoly problems. The article was widened to apply as well to corporations in a position to substantially control a market. The contribution also makes the point that section 46 remains difficult to apply because it must be demonstrated that the corporation has engaged in abusive conduct for a proscribed purpose and courts do not readily infer purpose from conduct or circumstantial evidence. The Chairman encouraged the Australian delegation to describe how these changes in scope have in fact worked or not worked.

The **Australian** delegate began by stating that the competition authority (i.e. the Australian Competition and Consumer Commission - ACCC) brings very few section 46 cases. Such cases are more often pursued by private parties. Nevertheless there have been some recent ACCC cases in this area and the delegate proposed to describe some of those in the process of answering the Chairman's questions.

The delegate first mentioned the *Safeway* bread case that involved price-fixing, retail price maintenance and the use of market power as a means of punishment. It is alleged that when the bread companies refused to follow the pricing policy required by Safeway, they were punished by the removal of all of their products from Safeway's shelves. The second case concerns alleged predatory pricing of masonry blocks. The third involves scrap metal and the use of market power to punish a refusal to engage in market sharing. The fourth case again centred on market sharing with the use of the dominant player's market power to punish. So of the four cases, three involved horizontal agreements and punishment.

In order to apply section 46, it must be established that a firm has a substantial degree of market power and has actually used it in the case at hand. There have been cases where courts found that a company has used something other than such power to engage in the acts complained of. Finally, as the Chairman has already stated, it must also be established that the conduct has an anti-competitive purpose. Establishing purpose is of course very difficult especially in the area of distinguishing between vigorous competition and predation. In most instances it is necessary to establish intent from inference and this can be far from easy especially in a general court which hears relatively few competition cases.

The 1989 *Queensland Wire* case referred to in the written contribution provided a new approach to the purpose test. It said that purpose could be inferred from conduct that would not be expected from firms in a competitive market. The delegate illustrated this with reference to the masonry building blocks predatory pricing case. In that case there are two well established players and both are vertically integrated concrete companies. There is also a fringe of smaller players. A new company entered the market with better, lower cost technology. The response by one of the major players was to sharply reduce price. To prove predatory pricing it is necessary to establish that a predator had a substantial degree of market power and that its purpose for dropping price was anti-competitive. The structural factors considered by the ACCC included: the existence of two major players with established reputations and substantial market shares; the smaller suppliers could not constrain the major players; there was excess capacity and some of the smaller players had actually exited the industry; and product standards were influenced by the two

major operators. In addition to the structural factors there were behavioural factors, notably the fall in price. It is noteworthy that Australian courts do not give the same weight as is accorded in some other jurisdictions to evidence that prices have been set below average variable costs.

There was some other interesting conduct in the masonry block case. The alleged predator expanded capacity in an over-supplied market and it did so using obsolete technology. It also contacted actual and potential customers of the new entrant and disparaged its product. In addition, the predator offered to buy out the new entrant at an inflated price. There was also some interesting price signalling. Prior to the alleged predation, the other major player had made several very public statements about the level of pricing, the difficulties that were being experienced and the necessity of raising prices. This would naturally increase the predator's confidence of being able to recoup his losses after the new entrant had been ejected from the market.

In the masonry block case any of the individual pieces of conduct probably do not of themselves prove predatory pricing. Taken together they are highly suggestive of such conduct. Predatory pricing is a very expensive form of conduct. To lower its cost, predators are likely to engage in a range of other conduct. By looking at that additional conduct, a competition authority is likely to be in a position to draw an inference about whether predation has occurred.

The **Chairman** next turned to Finland and commented that both article 6 and article 3(2) of its Competition Act could be used to attack oligopolistic co-ordination. Finnish case law indicates that it probably would be difficult to prove tacit collusion with mere circumstantial evidence. If the provision regarding abuse of dominant position were used, the competition authority would have to establish wilful and systematic co-operation, a difficult thing to do. Finland also offers the view that the oligopoly problem has not become a significant policy issue in Finland because of recessionary conditions since the start of the 1990's. Moreover its oligopolies have tended to be symmetric and have been well informed on each other's prices and products. The Chairman found this interesting given that the German contribution suggests industry maturity, declining demand, and symmetry tend to promote oligopolistic behaviour.

A **Finnish** delegate provided several reasons for little attention being so far paid to the oligopoly problem. The first had to do with priorities. During the 1990s the new Competition Authority devoted the main part of its resources to known cartels and dominance problems plus deregulation. The second reason had to do with the recessionary conditions that seem to have made it difficult for oligopolists in some sectors to maintain collusion. Each firm was struggling hard to survive. To do so, many offered hidden rebates and this undermined oligopolistic co-ordination. The third reason was linked to 1992 amendments to the Finnish Competition Act. A strict prohibition against cartels and abuse of dominance was introduced, and this presumably deterred some oligopolistic behaviour.

At this point the **Chairman** drew attention to the United States and the application of ss. 1 & 2 of the Sherman Act and s.5 of the FTC Act to oligopolistic problems. As regards the Sherman Act, it seems that under both sections 1 or 2, one or more plus factors must be demonstrated, i.e. pure parallel behaviour is insufficient to establish an illegal anti-competitive scheme. This tends to make it very difficult to establish tacit collusion. Section 5 of the FTC Act, which prohibits unilateral practices that facilitate collusion, might apparently be used to supplement the Sherman Act and this is illustrated with reference to the *Ethyl* case. The U.S. contribution also refers to the *Matsushita* case where it was held that under section 1 or 2 of the Sherman Act, "...plaintiffs must show that the inference of conspiracy is reasonable in light of competing inferences of independent action or collusive action that could not have harmed plaintiffs". This leads to the deduction that unless there is collusion, plaintiffs are not harmed by oligopolistic behaviour. And yet from the economic standpoint, one could argue that even in non-co-operative oligopoly there is a divergence from competitive equilibria, hence some harm to consumers. The Chairman also cited the submission's statement that: "In the wake of the US Supreme Court's admonition

that inferences of horizontal conspiracies must make economic sense, courts are increasingly likely to turn to evidence bearing on the conduciveness of the relevant market to collusion". The Chairman left the U.S. delegation with these questions: how are the plus factors established under ss. 1 & 2 of the Sherman Act; and what is the standard of proof that a unilateral practice under the FTC Act is not justified by a legitimate business interests?

The **United States** delegation led off by focusing on *Matsushita* where the US Supreme Court, on summary judgement, dismissed claims that approximately six firms in the Japanese consumer electronics business had engaged in a conspiracy over a period of some 20 years to charge low prices with the objective of eliminating the entire United States consumer electronics business. The Court held that the plaintiffs had not demonstrated a plausible economic theory making the allegations more likely than not. According to the Court, there was no direct evidence of conspiracy that the Japanese had over a period of 20 years engaged in low pricing with the intention of achieving dominance in the American market. Summary judgement was granted because the plaintiffs had introduced no evidence sufficient to counter the economic inference that it would be irrational for these firms to have conspired over such an extended period to put the U.S. firms out of business. Moreover, their alleged low pricing conduct was entirely consistent with rational independent economic behaviour.

The Court did not say that oligopoly is a good thing unless there is collusion. It is true however that oligopoly behaviour, and parallel pricing behaviour in particular, is not by itself illegal under US antitrust law. *Matsushita* should also not be read as saying that consumers are in any way better off or equally well off in the presence of oligopoly behaviour as they would be with vigorously competitive behaviour.

Returning to the fact that parallel pricing must be accompanied by one or more plus factors before it will be found illegal, this is grounded in the obvious point that one cannot require firms to irrationally eschew non-collusive parallel pricing merely to avoid antitrust prosecution. But when something more than mere parallel pricing behaviour can be persuasively demonstrated, the finder of fact can reach a conclusion that there was collusion. There is no simple formula concerning what the plus factors must be in any particular situation. The fact that members of the industry regularly get together in the same room, that they exchange certain kinds of information, that there is a history of collusion in the industry - any of those could be factors suggesting collusion. Of crucial importance in many cases is a demonstration that it would have been irrational for the firms to behave as they did absent some agreement. There is nothing to say, however, that the presence of any particular plus factor in a particular case will or will not meet the required burden of proof. And the burden of proof in these cases, usually brought as civil rather than criminal cases, is simply that the totality of evidence must suggest that collusion is more likely than independent action to explain the behaviour described in the case.

Another U.S. delegate addressed the Chairman's question concerning section 5 of the FTC Act and the standard of proof for establishing that a unilateral practice is not justified by a legitimate business reason. This section prohibits "unfair methods of competition" and allows the FTC to reach beyond the Sherman and Clayton Acts. The standard of proof depends on the specific circumstances of the case and industry. Where there is no express or implied agreement, such as would be covered by the Sherman Act, the FTC asks several questions. Is there evidence of anti-competitive intent or purpose on the part of the producer? Is there an absence of an independent legitimate business reason for the conduct, which is beneficial to consumers? Is there clear evidence supporting proof of anti-competitive effects? And of course, can the market be characterised as or proved to be an oligopoly? To answer these questions, the FTC might consider things such as: price signalling; plant shutdowns and output reductions by one company coupled with unusual amounts of inventory purchases from a competitor; and the use of most favoured nation clauses.

As an example of the application of section 5 of the FTC Act, the delegate referred to the "Infant Formula" case. In 1990 the Department of Agriculture, through several states, requested sealed bids for the supply of infant formula. Three firms, Abbott Laboratories, American Home Products, and Mead Johnson, accounted for 90% of the market. The companies allegedly disclosed information to their competitors to apprise them of their preferences and intent regarding their bids. More specifically, Mead Johnson sent letters to a number of states setting forth the amount it intended to offer in sealed bids for the upcoming contracts. The FTC alleged that there was no legitimate business reason for sending letters pre-disclosing bidding strategies when the states had not requested them. In fact, being informed of a price to be bid prior to the submission of a sealed bid defeats the competitive purpose underlying the process. In addition the FTC complaint alleged that Mead Johnson knew or should have known that its competitors would become aware of the contents of these letters and that its competitors did become so aware, thereby reducing competition.

The **Chairman** turned next to Italy, a country where it may be somewhat easier to use circumstantial evidence to prove an illegal oligopolistic agreement. He observed that the Italian Competition Authority does seem to rely quite heavily on such evidence. In addition, article 2 of Italy's Competition Act specifically includes facilitating practices among prohibited conduct. This effectively widens the scope for the use of circumstantial evidence. Prominent among the four cases presented in the Italian contribution is the *Security Guards* case involving auctions. In contrast with the U.S. infant formula case, there was no material evidence in this case establishing collusion.

An **Italian** delegate began by noting that Italy's four case examples share a characteristic which a leading economist, Lewis Phlips, has singled out as very important in increasing the likelihood of a collusive equilibrium. Each of the relevant markets contains less than five suppliers.

In the Sardinian *Security Guards* case there was indeed no material evidence whatsoever leading one to conclude with certainty that there was an agreement. In contrast, in the other three cases there was a very extensive exchange of information. Perhaps such an exchange of information was simply not necessary in the *Security Guards* situation. The case concerned a highly regulated market - even the number of firms and each of their capacities (i.e. number of guards) is fixed by regulation. Security guard services are contracted through auction so there is no private contracting. In the period from 1990 to 1995 there was a total customer stability among the leading four companies in Sardinia. Moreover, when the Competition Authority compared the value of the bids made in different auctions, it was clear that the companies agreed not to compete with one another. When bidding for renewal of a contract, companies systematically bid lower than when they were bidding for customers currently served by a competitor. In addition, when one of the smaller suppliers had excess capacity and bid for a contract, the leading companies submitted lower than normal bids. The Competition Authority had information concerning 106 bids. There was not one auction where the aforementioned pattern of bidding did not occur. The Authority argued that this pattern could not have been the result of independent choices by the companies. It could only be understood as the result of a concerted practice or agreement among the firms. The Authority consequently fined the big four companies. Although the fine was later suspended by the Council of State on procedural grounds, on substance the Authority's decision was accepted.

The Italian delegate finished by noting that the market in *Security Guards* was characterised by complete transparency. There could not have been any secret bids because all the bids were made available after the auction was over. This is why an exchange of information among the firms would have been superfluous. In addition, this was a situation where the same firms engage in repeated interaction giving them greater incentives and ability to co-ordinate their behaviour.

The next contribution examined was that of Korea. The **Chairman** remarked that Article 19 (5) of the Monopoly Regulation and Fair Trade Act allows the Korean Fair Trade Commission (KFTC) to

presume the existence of an agreement in certain circumstances. The Korean contribution gives an example drawn from the manufacture and sale of paper products. The Chairman called on Korea to explain the substance and comment on the utility of Article 19(5).

The **Korean** delegate noted that the KFTC considers four factors in applying the Article 19(5) presumption. The first is evidence of direct or indirect communications or exchange of information. The competition guidelines give some detailed examples, such as: co-incidence in the timing and contents of price increase notifications; parallel behaviour after holding a closed door meeting; agreeing to exchange information on prices and outputs; or meeting on a regular basis for such purposes. The second plus factor concerns whether the alleged agreement is contrary to the interests of individual parties unless carried out in concert. Suspicions would justifiably be aroused if companies engage in uniform price hikes in the absence of increased costs and the presence of over-supply in the market. The third plus factor arises when the conduct is not justified in terms of business purposes. For example, price changes are not justifiable when the range of price changes is identical although manufacturing costs vary. The final plus factor is an industrial structure or market situation precluding the possibility of accidental coincidence. This could occur, for example, when product differentiation has progressed to a considerable extent or when buyers lack the power to demand a uniform price.

The presentation was wound up with a description of the case contained in the written contribution. It concerns three companies, which jointly held 90% of the newsprint and 80% of the book stock markets. These companies increased their prices three times in about one year at almost exactly the same time and by the same magnitude. There were also certain communications among the parties. The KFTC therefore did not have any difficulty presuming the existence of a tacit agreement. However, the leading company argued that these facts were explained by the strong buyer power of the Korean newspaper association. The KFTC rejected this argument since it would have been very difficult even for the Korean newspaper association to exercise buyer power against oligopolists having almost 90 per cent of the market. In addition, the three companies actually succeeded in increasing the price three times in one year. Finally, and this was the most important ground for rejecting the argument, the newspaper companies were holding inventories sufficient for only one day's production. Such low inventories were customary in Korea at the time.

At this point the **Chairman** drew attention to section 18-2 of the Japanese Antimonopoly Act. That section gives the Japanese Fair Trade Commission (JFTC) some special powers of investigation in cases of parallel price increases by firms in an oligopolistic industry. The Japanese contribution states that: "In a particular field of business where the total annual price of products or services exceeds sixty billion yen, and where the combined market share of the three leading entrepreneurs exceeds seven tenths, if two or more entrepreneurs (including the largest one) raise prices by an identical or similar amount or percentage within a period of three months, the FTC may ask these major entrepreneurs for a report indicating the reasons for such price increases in their products or services." The JFTC report on such cases must be included in its annual report submitted to the Diet. The Chairman wanted to know how effective this process was in preventing oligopolistic co-ordination. He also wondered whether it was counterproductive in the sense that it might significantly increase market transparency thereby enhancing oligopolistic co-ordination.

A **Japanese** delegate noted that section 18-2 concerns parallel price increases in oligopolistic industries. This provision is believed to be unique among OECD countries. An overview of the provision is provided in the appendix to the Japanese written contribution. It is intended to enhance the transparency of price formation by oligopolists, encourage caution in the pricing decisions of such firms, and contribute to the promotion of fair and free competition in oligopolistic markets. The delegate believed that the provision does have a certain degree of deterrence value but its extent would be difficult to measure.

As for concerns that the reporting system might facilitate oligopolistic interdependence, the delegate doubted this was the case because the outline of the reports containing reasons for price increases is made public only after all pertinent procedures have been conducted by the JFTC, i.e. several months after the price increases have occurred. The delegate added that s. 18-2 is not a substitute for formal investigations against cartels or other horizontal anti-competitive activities. If the JFTC obtains enough information to prove the existence of cartel conduct, it will of course take the legal measures to end such.

The **Chairman** next turned to Sweden. Its written contribution recognised the difficulty of applying either abuse of dominant position or collusion prohibitions to oligopoly situations. It paid special attention to problems in oligopolistic network industries and how they might be solved through the application of the essential facilities doctrine. The Chairman asked for more information about that.

A **Swedish** delegate stressed that the Swedish competition authority does not oppose the international trend away from using the essential facilities doctrine. He agreed that it is usually better to head in the opposite direction, i.e. to encourage rather than discourage facilities based competition. The delegate also remarked on the apparent general trend towards greater application of Article 86 to oligopolistic markets and away from using "offensive measures" such as price control or forced divestiture. The latter measure has never been used in Europe. He also noted the trend towards greater use of "defensive" measures such as merger control and prohibitions on predation in order to preserve the structure of the market.

With particular reference to network industries such as the use of ATM's in banking, it seems likely that they will grow in importance even while traditional natural monopolies continue to decline in significance. Within network industries firms may have incentives to create exclusive clubs allowing large firms to enter while excluding smaller rivals. There is also the possibility that mutual determination of access prices will be used as a co-ordinating device. Conventional measures are sometimes ill-suited to solving such problems and there could be situations where compulsory access would permit reaping the benefits associated with a network and the benefits of competition.

In non-network industries, firms have incentives to create cartels but also to cheat on them. In contrast, in network industries there may be no incentive for a single firm to deviate from open or tacit agreements to exclude certain players. In particular there will be no individual gain reaped from allowing a small rival to share the network.

After the **Chairman** opened the floor to general discussion, **Germany** noted that it has some legal presumptions applying to oligopolistic situations and wanted to know whether this was also the case in other countries. The **Chairman** reminded delegates of Korea's general presumptions.

A **Canadian** delegate then asked the Swedish delegation whether its remarks applied to network industries in general or only to oligopolistic network industries in particular. A **Swedish** delegate implied the latter, noting that many network industries are textbook examples of oligopolistic industries.

A **German** delegate took up the theme of networks and the application of the essential facilities doctrine. Since networks are growing in importance in the world economy, competition officials will probably have to tackle this problem in the future. They could try to enforce vertical divestiture but this would likely prove very complicated, costly and infeasible. The essential facilities doctrine may be a real solution to the problem because it offers the chance to avoid divestiture yet force the owner of a network to grant access, at a reasonable price, to newcomers. The problem of course is how to set a reasonable price. He also noted that Germany was perhaps the first to introduce the essential facilities doctrine into its competition legislation. It is included in the provisions dealing with abuse of a dominant position.

The **Chairman** reminded delegates of the CLP's previous roundtable discussion on essential facilities and remarked that its proceedings are freely available on the internet, i.e. at "http://www.oecd.org/daf/clp/CLP-PUB.HTM".

A **Danish** delegate commented that oligopolies might be good or bad. Discussion in the roundtable had so far centred on how to cure bad oligopolies. Denmark has recently looked at the relationship between concentration and intensity of research and development. As in previous studies elsewhere, an inverted "u" curve relationship was found. Some of the firms devoting the most to research and development are located in industries having moderate levels of concentration. Too high a level of concentration seems to be harmful to research and development but some concentration appears to be necessary. Technically speaking, the propensity to perform R & D achieved a maximum in industries having an HHI of about 1000 (i.e. the level that would prevail if there were ten equal sized firms). If one accepts that some concentration is good but further concentration is bad, the question arises as to how to determine the level at which the effect changes. The **Chairman** later underlined that an inverted "u" curve relationship had several times been identified in other countries and referred to Professor Scherer's work. There may indeed be a trade-off between static efficiency and long-term or dynamic efficiency.

The **Danish** delegate also remarked on the dangers of companies getting together to discuss things which are not necessarily anti-competitive, e.g. common standards and guarantees. Such meetings could provide a forum in which to nurture collusive behaviour. There may well be a trade-off between competition concerns and arrangements seemingly beneficial to consumer or environmental interests.

2. Structural remedies

The **Chairman** opened the second part of the roundtable by noting the difficulties competition authorities face in using provisions designed to sanction agreements or abuse of monopoly power to fight co-ordinated oligopolistic practices. One way around this, at least in some jurisdictions, is to use merger control to prevent the emergence of oligopolistic structures. There are two possible advantages of merger control over behavioural measures. First, competition agencies can base merger review on proving a probability rather than an actuality of oligopolistic co-ordination. Second, the remedies associated with merger control are preventive rather than concentrated on reducing damage already materialising. Unfortunately, the merger route has its own special issues and difficulties. The first involves the appropriate standard for review. Some countries apply a dominant position test, others a substantial lessening of competition test and the two could sometimes lead to different results. There is also the problem, addressed in many countries' contributions, that oligopolistic structures do not necessarily produce oligopolistic co-ordination. Should merger control aim to prevent all kinds of oligopoly or just situations likely to lead to oligopolistic co-ordination? Most countries opt for the second approach but this leads to some difficult evidential issues. Finally, there is the question of which kind of remedy should be applied in merger control. Is divestiture or the creation of more firms always a good remedy?

The **Chairman** noted that New Zealand currently has no tools to attack tacit collusion in oligopolistic situations but is considering adopting some. The Ministry of Commerce has recently circulated a discussion document proposing to remedy that supposed weakness. It expresses a preference for merger control over behavioural remedies. New Zealand apparently believes that there is a higher risk of making errors in applying behavioural as opposed to structural oligopoly remedies. The Chairman sought elaboration on that point.

The **New Zealand** delegate provided two reasons for the Ministry of Commerce's reluctance to recommend amending sections dealing with anti-competitive agreements and understandings in order to deal with tacit collusion. Firstly, price uniformity may be a normal outcome of rational economic

behaviour in markets where there are few sellers and homogeneous products. It is therefore appropriate to insist on evidence of communication between competitors before a contravention can arise. Circumstantial evidence of parallel behaviour should not be enough. Secondly, as is pointed out in paragraphs 13 and 14 of the Secretariat's background paper, it is very difficult to devise suitable remedies for co-ordination falling short of explicit collusion. A court or competition authority order directing oligopolists to ignore the economic realities of the market in which they operate would be totally futile. Price regulation is a possible remedy but it too presents significant problems. In addition to the high risk of regulatory failure, price regulation implies ongoing supervision by the competition authority. The New Zealand competition authority, like its counterparts in other countries, would rather concentrate its scarce resources on other matters. In sum, the Ministry of Commerce believes that behavioural remedies are likely to be associated with such significant costs that the cure would prove worse than the disease.

Turning to merger control, under the New Zealand Commerce Act, the only mergers specifically prohibited are those creating or strengthening a dominant position. Joint dominance has been clearly excluded. If the government decides to amend the legislation, the best option would be to prohibit mergers, which potentially lessen competition, as is the case in United States and Australia. The delegate acknowledged the Chairman's point that errors could certainly be made in merger control given the fact that anti-competitive behaviour is far from inevitable in oligopolies. The Ministry of Commerce expects, based on Australian experience, that the proposed legal changes would not lead to a significant increase in the number of mergers brought to the competition authority, i.e. the Commerce Commission. Moreover, the Ministry has argued that the legislation should avoid being overly prescriptive. The courts and Commerce Commission should retain the flexibility required to assess properly the probable effects of mergers and to take market realities into consideration on a case-by-case basis. The Ministry of Commerce has also recommended that the Commerce Commission produce merger guidelines clarifying the analytical framework to be used in assessing whether mergers are likely to increase the risks of explicit and tacit collusion. New Zealand's written submission identifies some of the general characteristics to bear in mind as does the Secretariat's paper in paragraphs 27-65. The Ministry of Commerce thinks that the discussion of the thirteen factors could form the foundation for the discussion of oligopoly in merger guidelines generally.

The **Chairman** then turned to Australia and commented on an amendment made in 1993 to section 50 of the Trade Practices Act. This modified the standard for assessing mergers from a single firm dominant position test to a substantial lessening of competition test. The submission included discussion of the trade-off between the merger and behavioural tests. The more difficult it is to apply the behavioural provisions the more reliance should be placed on preventing oligopolistic problems from emerging in the first place. Australia's submission also surveyed a number of merger cases occurring both before and after the 1993 amendment. The Chairman invited comment in particular on the *Wattyl/Taubmans* proposed merger. He also asked whether the result in that case would have been any different under the former dominance oriented test.

An **Australian** delegate explained that in 1986 his country changed its abuse test from a test applicable to dominant firms to a test applicable to firms having some market power in an oligopoly situation. After that, in 1993, the merger test was changed from dominance to substantial lessening of competition. The reasoning was firstly that as a matter of principle it seemed clear that the competition law should cover any merger substantially lessening competition even if it did not give rise to dominance. Secondly, a substantial lessening of competition test was consistent with the thrust of the rest of the Act, which prohibits anti-competitive behaviour, for example collusion. Moreover, there was a history of mergers occurring following prohibitions on price-fixing agreements between competitors, which Australia wished to stop. Thirdly, Australia preferred structural outcomes to behavioural regulation. The delegate remarked in passing that in Australia the big agenda for merger policy lies in the deregulated areas where there is currently a very high level of merger activity. Australia thinks it is especially important in such

sectors to have an appropriate merger law otherwise many of the good effects of deregulation could be undone by mergers.

During the heated debate concerning the 1993 changes, the government approached the ACCC, and expressed reserves about adopting a substantial lessening of competition standard. The ACCC was asked whether a halfway house could instead be built using the collective dominance concept. Following certain inquiries, the ACCC concluded that proceeding in that direction would cause the courts to unduly focus upon collusion possibilities and would probably cause legal confusion. Joint dominance was another term that was bandied about but in law "joint" generally refers to two rather than several. So the ACCC opted instead for the substantial lessening of competition test. As New Zealand has pointed out, there has been no big change in the proportion of mergers notified to or opposed by the ACCC except in the early years when people were getting used to the test. It is probable, however, that a number of mergers that would have been contemplated in the old days are no longer taking place.

Reviewing the application of the dominance law, it is clear that during the 1980s some mergers occurred which would not have been possible under the substantial lessening of competition test. Considerable pressure has developed for Australia to adopt a divestiture remedy in its competition law partly to break up some of those mergers. Behavioural measures have also been urged against them.

As for the *Wattyl/Taubmans* merger, this was a classic three down to two merger. There was a dominant player with a 45% market share. The second and third ranked firms, with 27% and 19% market shares, proposed to merge. That would have resulted in two players each with approximately 45% of the market. The question was whether this would strengthen or weaken competition. The firms argued that the merger was necessary to create a second player capable of competing with the market leader. The counter argument was that it would lead to a cosy duopoly. The ACCC first of all consulted all the game theory textbooks and found they offered little assistance. It then went to the market and asked a lot of questions. In the end, the ACCC concluded that this merger was likely to reduce competition. It turned out that there were quite high entry barriers into the paint market and imports were insignificant. There was quite a lot of competition between the merging parties, and this was having an effect on competition right across the industry. The ACCC therefore decided to block the merger. It was heartened to see sometime later a merger between the third and fourth ranking firms. Both of those had genuine weaknesses that the merger helped remedy. The result was a third serious player and enhanced competition in the paint market. The ACCC did not engineer that outcome and does not generally believe in such engineering.

The **Chairman** then focused on Canada and noted that under section 92 of its Competition Act mergers can be blocked by the Competition Tribunal if it finds that the merger "prevents or lessens or is likely to prevent or lessen competition substantially". This provision covers both unilateral effects and anticipated co-ordinated effects referred to as "interdependent behaviour". The Chairman was somewhat confused by this terminology. To him, interdependent behaviour meant no collusion and co-ordinated effects meant there is collusion. His first question to the Canadian delegation was which kind of oligopoly is it trying to prevent through merger control? All oligopolies or only the oligopolies which are, or are likely to be conducive to co-ordinated practices? In addition he wished to know why there have been very few contested merger cases in Canada and whether that meant its merger provisions were of little use in attacking oligopolies.

A **Canadian** delegate began by pointing out that interdependent behaviour is intended to have the same meaning as co-ordinated effects. As for the second question, the Competition Bureau regularly discusses with the parties, on a voluntary basis, concerns it has about proposed mergers. Sometimes there are serious problems that cannot be overcome by the parties, but rather than face the prospect of challenge

before the Competition Tribunal they decide to abandon their merger plans. This is one of the main reasons for the lack of litigated mergers involving anticipated interdependent behaviour.

Later in the general discussion the same delegate spoke about the practical difficulties involved in proving cases involving both oligopoly effects and efficiencies. Under Canadian law a merger substantially lessening or preventing competition cannot be blocked if there are offsetting efficiencies. Dealing with this in Court could be very problematic. The alleged anti-competitive effects would typically appear considerably more hypothetical than the alleged efficiencies.

The **Chairman** moved on to questions for the U.S. delegation. He observed that merger control could be used in the U.S. to block mergers, which would lead to co-ordination between firms and therefore can be applied to prevent the creation or strengthening of oligopolies. The U.S. contribution notes that courts typically try to determine whether the post merger market is susceptible to co-ordination and/or whether the merger substantially increases the risk of such behaviour. This led the Chairman to enquire about the relative importance of merger specific as opposed to industry specific factors in assessing the risk of post-merger co-ordination. He also wanted to know how much the risk of co-operation must grow before a merger would be blocked.

A **United States** delegate began by noting that in addition to increased market share, key industry characteristics that may increase the likelihood of co-ordination include: high concentration among sellers; product homogeneity; inelastic demand; similar cost structures and price transparency. Another important factor is whether the industry has a history of collusion and whether or not it has been successful. Where market conditions are conducive to timely detection and prevention of cheating by the other participants in the oligopoly, a firm may find it more profitable to abide by terms of co-ordination than to deviate from them. For example, it would be difficult for firms to deviate successfully or secretly if key information about specific transactions, individual prices or output levels were available to colluding competitors, or if demand or cost fluctuations were relatively rare.

Where mergers have been cleared even though there was an increased risk of co-ordinated effects, the risk was not considered to be substantial enough to warrant blocking the merger. This cannot be discussed further in the context of any specific case because it is FTC policy not to confirm or deny the existence of a non-public investigation or even the fact that firms have made pre-merger filings. The delegate noted, however, that efficiencies also enter into the decision concerning whether to allow a merger and referred as well to the possible mitigating influence of maverick firms (i.e. firms, which will undercut price to gain market share). Efficiencies will not justify a merger to monopoly or near monopoly, but real and substantiated efficiencies may help justify a merger in a less concentrated market even if the market concentration figures raise initial concerns.

The delegate described how the FTC successfully challenged two horizontal mergers under a co-ordinated interaction theory involving the four largest U.S. drug wholesalers --McKesson merging with AmeriSource and Cardinal Health merging with Bergen-Brunswig. Last year the FTC filed in Federal District Court a preliminary injunction action alleging that if the mergers were permitted, the merged entities would control over 80 per cent of the market for prescription drug wholesaling, thus significantly reducing competition in prices and services. The court blocked the proposed transactions despite the parties' arguments that the transactions would result in efficiencies that would outweigh any increased risk of co-ordination. These efficiencies included distribution efficiencies, better purchasing practices, and reductions in overhead and inventories. While rejecting most of these claims, the judge agreed there would be some merger specific efficiencies. However, he ultimately concluded that they were insufficient to outweigh the transactions' anti-competitive effects. Three of the four defendants had contracts with a large hospital purchasing organisation that contained certain provisions that appeared to guarantee a favourable price. There was evidence, however, that the effect of these provisions was to set a floor on the price that

the defendants would offer to other hospitals and group purchasing organisations, and the provisions could serve to police any attempts by the defendants to under-price one another. Based on this evidence, the court concluded that the defendants would have an increased ability to co-ordinate their pricing practises after the merger.

The **Chairman** commented on the history of collusion effect saying that a naive observer might perhaps remark that where there has been extensive collusion in an industry, a merger is not going to make much difference. But if there was a lot of competition and all of a sudden the market becomes a tight oligopoly with co-ordinated practices, that is when one would want to block a merger because it could make a big difference in the level of prices. He acknowledged, however, that a merger could render permanent a situation, which could possibly have been attacked under the Sherman Act as collusion.

A **European Commission** delegate, again in the general discussion that followed, supported the U.S. view concerning the past history of collusion factor and provided a recent example. In the Danish Crown case, prior to the merger, there was a buyer cartel among four Danish companies. One of the effects of the concentration was precisely to internalise this buyer cartel and extend it to the retail level thus facilitating collective parallel behaviour with the only remaining competitor in Denmark. The existence of collusion prior to a merger certainly does not make it more difficult to block on a collective dominance basis.

Returning to the written submissions, the next country questioned by the **Chairman** was Japan. He noted that the Japanese merger provisions incorporate a substantial restriction of competition test and cited the statement: "The probabilities of both unilateral effects and co-ordinated effects are analysed in examinations of market concentration". The Chairman asked the Japanese delegation why so few mergers have been challenged under this provision? Are there very few oligopolistic industries in Japan, hence not much concern about co-ordinated effects arising out of mergers in those industries, or is it for other reasons such as a possible defect in the law or practical difficulties in applying it?

A **Japanese** delegate began by reiterating that whether a proposed merger is likely to restrict competition substantially or not is a key factor in the JFTC's merger review process. A merger will be prohibited when there exists a possibility of "substantial restraint of competition".

The JFTC's new merger guidelines, issued the previous December, clarify how a proposed merger is examined in terms of substantial restraint of competition. It considers many factors including: number of competitors and degree of competition; entry barriers; competitive pressures from neighbouring markets; existence of strong competitors; etc.. The possibilities of co-ordinated effects are also mentioned in the guidelines. For example, in terms of the number of competitors and degree of competition, the guidelines clearly state that if as a result of a merger or acquisition, "…the number of competitors decreases, and the market becomes oligopolistic, for example, the top three firms' concentration ratio exceeds 70%, the tendency of co-operative business conduct between companies will also be considered."

As to why few mergers have been challenged based on the possibility of co-ordinated effects criteria, it should be noted that the JFTC considers every merger case on a case by case basis and if necessary, possibilities of co-ordinated effects have been examined in the process of merger review. The delegate described the *Mitsui OSK Lines/Narvix Lines* case as an example where the JFTC considered the possibility of co-ordinated effects. The parties were overseas shipping agents proposing to merge in order to strengthen their managements and increase their global competitiveness. Both companies operated company owned vessels or vessels leased or chartered from other ship owners.

The JFTC found that the Mitsui/Narvix merger would have resulted in the top two companies having between 50% and 70% shares in the four markets affected, i.e. iron ore, chips, coal and crude oil

transported by liner service. It therefore examined whether the proposed merger would foster co-ordinated effects. Three points were considered. First, strong competitors existed both in Japan and abroad. Second, agents in the overseas shipping business cannot be said to have advantageous bargaining positions in price negotiations because the price is influenced by international market conditions. Third, cargo owners have strong buyer power. Having regard to all these factors, the JFTC determined that the proposed merger would probably not substantially restrain competition through co-operative behaviour with other competitors of the new company.

The **Chairman** then proceeded to the Swiss contribution commenting first on its neutrality -- it avoids choosing between the substantial lessening of competition and dominance tests. Its own particular test is dubbed a qualified dominance approach. The Chairman's initial question was how Switzerland mixes the two tests. He also noted a second interesting aspect in the Swiss contribution. It echoes the New Zealand view that the difficulty with oligopoly is how to separate natural parallel behaviour from collusion. But it goes on to say, as New Zealand did, that this distinction is less problematic in merger control then in the application of behavioural provisions. The Chairman sought some elaboration on this point.

The **Swiss** delegate explained that the written contribution was somewhat inexact. Instead of saying that the distinction between collusion and mere interdependent behaviour would be any easier to make in the merger context, it should have said that this distinction is irrelevant in merger control. This is because whatever kind of collective dominance is triggered (or strengthened) by a merger, the Swiss Competition Commission could intervene to either prohibit or condition it.

As for the question about what is a qualified dominance approach, this expression actually is not used in the Cartel Act. It appears rather in scholarly comment on this law. What it means is that "dominance" alone is insufficient to trigger intervention by the competition authorities. What is also necessary is the elimination of effective competition. The Commission leans to the view that a dominant position automatically leads to the elimination of effective competition. It might be argued, however, that assessing whether or not effective competition is eliminated requires balancing possible anti-competitive market power against efficiency gains to estimate the total welfare effect. As the Swiss law is still very young, dating only from 1996, the courts have not yet decided this issue.

The **Chairman** next proceeded to the German contribution drawing attention to its detailed discussion of the structural criteria used to assess mergers from the point of view of oligopolistic dominance. He noted that the submission also provided some interesting examples, in particular the *Philips/Lindner* case. The Chairman was particularly interested in the market phase criterion that receives more emphasis than in other countries' written contributions. It is stated that: "Dominant positions are...more likely to exist in the maturity and stagnation phases of a market than in the experimental and growth phases." Read as saying that oligopolistic dominance is expected to be much more prevalent in a mature or stagnating industry, this sentence appears to be directly contrary to what was expressed in the Finnish contribution. The Chairman invited the German delegation to elaborate on the importance of market phase.

A **German** delegate began by explaining that the written contribution mistakenly gives special importance to market phase in evaluating merger is in Germany. A heading was unfortunately omitted from the text. Between paragraphs 14 and 15 there should have appeared, "Overall Assessment". Paragraph 15 does not apply solely to "market phase" but rather to all the previously mentioned factors. This is not to deny that market phase does play an important role in merger review. Collusion between competitors is usually favoured by the expectation of long-run profits. So the probability of co-ordinated interaction is affected by market phase and product cycles. In the maturity and stagnation phase, some competition factors, such as product innovation and differentiation, exercise less discipline on oligopolistic

dominance. On the other hand, market conditions that facilitate collusion often become more important. As an example, over-capacity tends to become more prevalent and this increases the probability that cheaters will be punished. Secondly, demand is stagnant or grows more modestly, so companies know that any sales gains can be made only at the expense of rivals who will naturally resist a loss of market share. The result could be a price war with no winner. Over-capacity and stagnant conditions are also hardly likely to attract new entrants that could undermine collusive behaviour. Several German merger cases have confirmed that co-ordinated interaction is more likely in the mature and stagnation phases of an industry.

The **Chairman** next turned to the European Union, highlighting article 2 of the EU merger regulation which states that "…a concentration which creates or strengthens a dominant position as a result of which effective competition would be significantly impeded in the common market or in a substantial part of it shall be declared incompatible with the common market." The EC Court of Justice in *Kali and Salz* confirmed the inclusion of collective dominance in the merger review test, and the doctrine also was featured in the Commission's decision in *Nestlé/Perrier*. The EU in its contribution states that when it has a merger that might create a collective dominant position, it examines, among other things, the competitive relationship among the oligopolists. The Chairman wanted to know more about the criteria used to assess that. He further commented that in *Nestlé/Perrier*, the Commission required divestitures to create three players of roughly equal size. It seems that some other competition agencies, including the German Budeskartellamt, believe that symmetry in over-capacity tends to favour oligopolistic co-ordination. The Chairman wondered why the Commission apparently thought in *Nestlé/Perrier* that a symmetric triopoly was better for competition than an asymmetric duopoly. He also wanted to know whether the EU includes over-capacity among the criteria employed to assess the probability of oligopolistic co-ordination.

As for assessing the competitive relationship among oligopolists, a **European Union** delegate explained that this requires a very detailed analysis of how the market works. It is particularly necessary to understand the competitive interaction among the oligopolists, and how the merger could change that. The delegate referred to the recent *Gencor/Lonrho* case where the Commission, based on internal papers from the companies, learned that one of the purposes of the merger was to change competitive relationships in the oligopoly so as to reduce competition. This is why the Commission decided to block the merger.

The EU delegate also noted some other criteria normally examined: market transparency; product homogeneity; cost and market share symmetries; rate of technological change and market growth; etc.. The difficult problem is how to combine these criteria. There is no good formula for doing this but transparency seems to be particularly necessary and problems are unlikely if technological change and market growth are high enough.

Another EU delegate addressed the Chairman's question re-*Nestlé/Perrier*. He noted that the Commission did not believe that the transaction as reported to it would have led to an asymmetric duopoly because part of the deal included the transfer of assets from Nestlé to BSN. Owing to this transfer the deal would probably have created a symmetrical duopoly. So the Commission was confronted in this case with the possibility of a symmetric duopoly and the remedy the Commission accepted in order to clear the merger came through creating a viable competitor for this duopoly. The Commission needed to ensure that the new third player would have the critical mass required to compete in the market. Based on data available, such a critical mass necessitated a combination of assets both at the national and local levels, hence a company with a substantial market size. This does not mean the remedy created a symmetric triopoly. BSN acquired significant assets and simultaneously Nestlé lost significant assets to a third player. This resulted in an asymmetrical triopoly at least in terms of market share and capacity.

A recent report prepared by an independent third party for the Commission maintains that the above-described remedy has worked. Competition in this segment of the mineral water market in France is apparently satisfactory.

The **Chairman** surmised that the EU shares the view that asymmetric oligopolies pose less danger to competition than symmetric ones. The **EU** delegate agreed, but wanted to stress that asymmetry does not ensure there are no competition problems. He gave the recent example of the Danish Crown case where, for the first time, the Commission determined that a problematic duopoly existed despite asymmetric market shares.

The **Chairman** then turned to the UK and encouraged participants to obtain a copy of the room document containing the NERA report commissioned by its Office of Fair Trading (OFT). NERA found that oligopoly theory is of limited use in predicting how a market is likely to behave following a merger, a point made earlier by the Australian delegate. This is apparently because: 1) the vast number of oligopoly models and their sensitivity to small changes in assumptions make them very unpredictable tools; and 2) the structure of oligopolies, and indeed the nature of competition, is endogenous and likely to evolve over time. So far the roundtable discussion has broadly assumed that the structural change introduced by a merger would lead with a certain probability to a change in behaviour which might be a menace to competition. Now, the Chairman noted, delegates are being asked to consider that the behaviour itself could in turn affect the oligopolistic structure of the industry. The dynamic nature of the market must be taken into account, as in fact is usually the case in merger analysis. A Danish delegate mentioned this when discussing the innovation dimension.

NERA's view that economic theory is only of limited value seems to contradict a sentence in the U.S. contribution reading, in part, "...successful analysis (and pursuit) of co-ordinated effects merger cases will increasingly depend upon the ability to integrate factual evidence with economic theory." The Chairman invited UK comment on the degree to which economic theory can assist competition officials in analysing oligopoly cases.

A **United Kingdom** delegate began his remarks by stating that the NERA report was commissioned by the OFT to try to clarify and perhaps support OFT's approach to analysing mergers in oligopolistic markets. The report's methodology was to examine the academic economic literature and then review eleven merger cases to see what happened in the market subsequent to an assessment by the OFT or the Mergers and Monopolies Commission. Overall, the NERA report, which provides a very good survey of the academic literature, did not provide any startling rules for improving merger analysis in the oligopoly context. The report's conclusion confirmed the general approach that most competition authorities take towards looking at unilateral and co-ordinated effects arising from mergers. The case studies, generally supportive of OFT decisions, highlighted that markets are dynamic and that it is difficult to predict post-merger behaviour. There are two market features that seem worthy of special mention. One is the rate of technological change. In an innovative market there is less scope for co-ordinated behaviour. Secondly, the role of buyers is important. Powerful buyers can often initiate changes in the market in response to increased concentration caused by a merger, including promoting new entry.

The NERA report did not provide the OFT with any bright lines for analysing mergers involving co-ordinated behaviour. The process for analysing such mergers is quite complicated and there is clearly a need for a case by case, market by market analysis.

The delegate noted that oligopolistic structures come up very often in analysis of industries under the UK's complex monopoly provisions. He also mentioned that the UK had recently embarked on two examinations of oligopolistic markets - automobiles and supermarkets. One great difficulty is what would be the appropriate remedies in such cases. It is hard to get firms to compete more vigorously if they

operate within structures where the rules of the game are not conducive to competition. As a parting comment, the delegate mentioned that international sharing of experiences contributes to effective judgements being made in oligopoly cases.

At this point, the roundtable was opened to general discussion and the United States and European Union made the previously noted points about the importance of past collusion as an indicator to consider in assessing the probable impact of a merger. The **United States** delegate also noted that excess capacity could be a two-edge sword when it comes to affecting the probability of co-ordinated effects. The presence of excess capacity makes punishing cheating easier and more effective, hence more credible. But it also could create powerful incentives to cheat, i.e. low marginal costs make extra sales particularly profitable.

A **European Union** delegate also noted that under the rubric of behavioural remedies, the roundtable had examined essentially Articles 85 and 86 and parallel provisions in other countries. Under structural remedies delegates had dealt chiefly with merger control. He stated that the EU would have preferred to distinguish between preventive or prospective analysis and *ex post facto* analysis. This is because talking about structural and behavioural remedies might sow confusion as to whether or not the Commission could apply structural remedies in Articles 85/86 cases. Although Article 86 is not well adapted to using structural remedies, the Commission has on occasion proceeded in that way in certain single dominance cases. One can imagine therefore, in view of the *Gencor/Lonrho* decision, which the Commission might consider the possibility of structural remedies under Article 86 to deal with anti-competitive parallel behaviour. He noted however that applying structural remedies might present special political and psychological difficulties.

An **Irish** delegate focused on the dominance versus substantial lessening of competition test in merger review. The Irish Competition Act does not directly employ either test. When the Minister refers a merger to the Competition Authority, the latter is required to proffer its opinion as to the merger's competitive effect. Merger policy is currently being reviewed in Ireland and the Authority has recommended that the substantial lessening of competition test be applied. At the moment the situation is so vague that no one knows what the rules are.

The Irish delegate also referred to a merger that took place four or five years ago in the motor fuels sector. This would have resulted in the number of sellers dropping from five to four and the acquired party was one that had a consistent record of competing on price. To alleviate its concerns the Authority used its influence to obtain a deal whereby the acquirer sold off a significant part of the firm being acquired.

Concerning the point about how to separate harmful oligopolies from innocuous ones, the delegate remarked that if this could actually be done everything would be fine. He observed that from the discussion so far, it appears that there are various rules of thumb that could be applied but there is no definitive answer. The delegate urged consideration of the costs involved in getting a merger wrong, i.e. allowing a merger that should be blocked or blocking one that should be permitted. He closed by paraphrasing a comment in a Financial Times article which apparently concluded that merger assessment was a system of "rough justice". Some mergers get through which should not and vice versa. But a system of rough justice is better than a system of no justice at all.

3. Chairman's Summary

The Chairman commented that the discussion had been both interesting and difficult to summarise, although the last few interventions had made a start on it. His impression was that economic

science is only loosely related to the oligopoly problems examined. There seems to be little in the way of economic analysis which will significantly improve the accuracy of judgements that competition authorities must make. Oligopoly issues involve a good deal of uncertainty and competition officials of necessity apply a very impressionistic and probabilistic art of oligopoly control employing very broad structural industry characteristics to estimate the probability of oligopolistic co-ordination. But the weights attached to the various criteria are very imprecise, and in actual fact competition agencies have a great deal of flexibility in their analyses. The Irish delegate characterised this as rough justice. Whether competition agencies can do better is unclear. One of the interesting aspects of the UK's NERA report is that it examined mergers retrospectively to ascertain the degree to which competition agency predictions were verified. Perhaps more such exercises could usefully complement what competition authorities do.

The Chairman also noted that competition authorities seem to be engaged in some strategic behaviour of their own in response to the oligopoly problem. This is seen when they consider applying something like Article 85 but switch to the Article 86 analogue when they lack sufficient evidence of agreement, and simultaneously back this, where possible, by using merger review. Some delegations seemed to allude to this behaviour, but it really was not fully examined in the roundtable.

AIDE-MÉMOIRE DE LA DISCUSSION

Le **Président** note que le thème de la table ronde suscite un grand intérêt, comme en témoignent les communications adressées par 14 délégations. Nombre de ces communications concernent les outils comportementaux et structurels susceptibles d'être utilisés face aux problèmes posés par les oligopoles. Le Président décide d'articuler la discussion en deux parties correspondant à ces deux catégories d'outils.

1. Outils comportementaux

Le Président fait observer que les outils comportementaux que l'on trouve dans les dispositions concernant les abus de position dominante ou les ententes sont difficilement applicables aux problèmes oligopolistiques en raison surtout des difficultés que soulève la mise en évidence d'accords tacites. A cela s'ajoute, dans certains pays, la question des moyens à utiliser pour apporter la preuve d'une domination collective ou conjointe.

Le Président note que la communication de la Commission européenne examine longuement l'applicabilité des articles 85 et 86 aux comportements oligopolistiques. Il rappelle la décision rendue dans l'affaire *Wood Pulp ("Pâte à papier")*, suivant laquelle un comportement parallèle ne constitue pas en soi une pratique concertée au sens de l'article 85. Ce parallélisme ne peut être considéré comme la preuve de l'existence d'un accord ou d'une pratique concertée que dans les cas où des consultations, et non la structure oligopolistique d'un marché, constituent la seule explication plausible d'un comportement parallèle. Le Président demande à la Commission européenne de formuler des commentaires sur le niveau de preuve requis pour établir cette condition et l'invite à procéder à une comparaison entre les affaires *Pâte à papier* et *Fiatagri*.

S'agissant de l'application de l'article 86 aux comportements oligopolistiques, le Président évoque les difficultés que soulève la notion de domination collective. Il pense que les quelques cas de domination collective ayant fait l'objet de procédures devant les tribunaux des Communautés européennes impliquaient des liens économiques de nature structurelle entre les entreprises concernées. La décision rendue dans l'affaire *Gencor/Lonrho* semble avoir modifié la signification de ces liens structurels. Le Président souhaite soumettre deux autres questions à la Commission. Dans les cas impliquant des oligopoles, dans quelle mesure peut-on substituer l'article 86 à l'article 85 ? La décision rendue dans l'affaire *Gencor/Lonrho* contredit-elle ce que dit la Commission européenne dans sa communication écrite au sujet de la nécessité de mettre en évidence des liens économiques de nature structurelle pour établir l'existence d'une domination conjointe ?

Un délégué de la **Commission européenne** fait observer que la Commission considère que l'article 85 ne constitue pas une base juridique suffisante pour contrôler les oligopoles. La Cour de justice européenne a déclaré, dans la décision qu'elle a rendue dans l'affaire *Pâte à papier*, qu'un comportement oligopolistique, c'est-à-dire une entente tacite ou un comportement parallèle sur le marché, constitue en fait une défense contre l'application de l'article 85. En d'autres termes, si des entreprises peuvent démontrer que leur comportement parallèle sur le marché est dû aux caractéristiques structurelles du marché, la Cour de justice ne conclura pas à l'existence d'une pratique concertée. Par conséquent, l'article 85 est d'une application très limitée dans la résolution des problèmes liés aux oligopoles.

Néanmoins, une affaire récente donne à penser qu'il serait de plus en plus possible de l'appliquer dans le but de restreindre les échanges d'information de nature à faciliter les ententes.

Les dernières évolutions les plus intéressantes, en matière de droit communautaire, concernent plus l'article 86 que l'article 85. Les précédentes décisions de la Cour de justice, notamment celle qu'elle a rendue dans l'affaire *Hoffman La Roche*, laissaient entendre que l'article 86 ne s'appliquait pas aux situations d'oligopole pur. Or, les choses ont évolué à cet égard. S'appuyant sur le libellé de l'article 86, qui mentionne clairement la possibilité d'abus d'une ou de plusieurs entreprises, la Commission n'a jamais renoncé à la possibilité d'appliquer l'article 86 à des situations de domination collective. La Commission a appliqué le concept de domination collective pour la première fois dans l'affaire *Italian Flat Glass* ("*Verre plat italien")*. Bien que la Cour ait par la suite annulé en grande partie la décision de la Commission, elle a accepté le principe suivant lequel l'article 86 pouvait être appliqué à des situations de domination collective dès lors que des « liens économiques » existaient entre les parties détenant une position dominante collective.

A la suite de la décision rendue dans l'affaire *Verre plat italien*, un débat s'est engagé sur la question de savoir ce qu'il fallait entendre par "liens économiques". Deux écoles se sont alors opposées. L'une s'en est tenue à une interprétation étroite, faisant valoir que l'article 86 ne pouvait être appliqué que lorsque les liens économiques avaient un caractère structurel. Dans la décision qu'elle a rendue au sujet de la fusion *Kali et Salz*, la Commission s'est rangée à ce point de vue. Bien qu'elle ait annulé cette décision, la Cour de justice a admis qu'il était possible de s'attaquer à des oligopoles en vertu du règlement relatif aux fusions dès lors que des liens structurels existaient.

Pour l'autre école, la notion de "liens économiques" ne se limite pas aux situations dans lesquelles il existe des liens structurels manifestes entre les parties, mais s'entend également des comportements parallèles s'appuyant sur la structure du marché. Cette idée a été développée par la Commission, mais dans le contexte du contrôle des fusions, et non dans celui de l'application de l'article 86. En fait, la décision *Hoffman La Roche* était encore considérée comme un obstacle important à l'application de l'article 86 aux oligopoles, parallèlement à un certain nombre d'autres raisons évoquées dans le document de référence du Secrétariat (c'est-à-dire, surtout, la difficulté de concevoir des remèdes adaptés). Cependant, dans la décision qu'il a rendue récemment dans l'affaire *Gencor/Lonrho*, le Tribunal de première instance a estimé qu'en vertu de l'article 86 et du règlement relatif aux fusions, il y a position dominante collective non seulement lorsqu'il existe des liens structurels mais aussi en situation d'oligopole pur. Pour parvenir à cette conclusion, le Tribunal a interprété sa propre décision dans l'affaire *Verre plat italien*. Ainsi, par "liens économiques", il désigne les situations dans lesquelles les parties à un oligopole reconnaissent qu'elles ont collectivement intérêt à avoir un comportement anticoncurrentiel, etc. En d'autres termes, d'un point de vue purement juridique, la Commission peut s'appuyer sur l'article 86 pour s'attaquer aux comportements abusifs en cas d'oligopole pur, c'est-à-dire lorsqu'il n'y a pas de liens structurels.

La Commission n'a pas eu suffisamment de temps pour réfléchir aux incidences d'une extension du champ d'application de l'article 86. Elle reconnaît les difficultés déjà mentionnées concernant la conception de recours adaptés face à des comportements oligopolistiques abusifs. Le contrôle des prix semble la voie de recours la plus évidente, mais elle peut soulever certains problèmes. La Commission l'a utilisé dans un certain nombre de cas de domination individuelle.

Le délégué de la Commission ne pense pas qu'il y ait un manque de cohérence entre la décision *Gencor/Lonrho* et les décisions antérieures de la Commission. Dans plusieurs rapports annuels sur la concurrence, la Commission a indiqué que rien, dans l'énoncé de l'article 86, ne l'empêchait de contester des comportements abusifs dans le contexte d'un oligopole. La position de la Commission dans l'affaire

Gencor/Lonrho consiste précisément à considérer que la décision *Verre plat italien* n'est en aucun cas incompatible avec la lutte contre les pratiques abusives des oligopoles en matière de prix.

Le **Président** fait observer que la communication de la délégation norvégienne évoque un aspect supplémentaire important concernant le niveau de preuve exigée dans les cas de comportement oligopolistique. Si l'autorité norvégienne de la concurrence estime qu'il y a eu infraction, elle peut engager une procédure pénale ou civile. Les niveaux de preuve peuvent être différents suivant la procédure, et des preuves indirectes peuvent être plus facilement acceptées dans les procédures civiles. Cependant, la communication norvégienne indique que seule la procédure pénale a été utilisée jusqu'à présent. Si la procédure pénale est plus difficile à utiliser et si l'on n'a pas recours à la procédure civile, le Président souhaiterait savoir s'il faut en conclure que la législation norvégienne sur la concurrence n'offre guère de perspectives d'éliminer les pratiques oligopolistiques.

Un délégué de la **Norvège** précise que la communication écrite de son pays concerne exclusivement l'interdiction des accords horizontaux. Il n'existe pas, en Norvège, d'interdiction comparable à l'article 85 du Traité CEE. Les interdictions ne visent que les ententes sur les prix, les soumissions concertées et les accords de partage du marché. Par ailleurs, l'autorité de la concurrence a le pouvoir général d'intervenir à l'encontre d'autres comportements anticoncurrentiels. Comme l'a indiqué le Président, deux types de procédure peuvent être suivis. La procédure pénale peut aboutir à une condamnation à des amendes (à des particuliers et à des entreprises) et à des peines de prison. Dans le cadre de la procédure civile, les parties peuvent être condamnées à rembourser les gains illicites. Si la seule procédure pénale a été utilisée jusqu'à présent, c'est parce que les affaires qui se sont présentées reposaient dans une large mesure sur des preuves écrites et des témoignages. En outre, dans le cadre d'une procédure civile, l'autorité de la concurrence doit apporter la preuve d'un gain lié à l'infraction, ce qui peut se révéler très difficile. Il convient de noter que l'autorité travaille actuellement sur certaines procédures civiles afin de déterminer précisément ce qui constitue une pratique concertée. Le délégué de la Norvège note accessoirement que l'utilisation de preuves indirectes pour établir l'existence d'une entente soulève des difficultés juridiques et économiques considérables.

Le **Président** mentionne ensuite la communication australienne, notant en particulier certains amendements apportés en 1986 à l'article 46 de la loi sur les pratiques commerciales. Avant ces modifications, l'article 46 n'était applicable qu'aux monopoles ou aux positions manifestement dominantes sur le marché. Il était donc très difficile de s'attaquer au problème des oligopoles. L'article a été élargi de manière à s'appliquer également aux entreprises qui sont en mesure de contrôler substantiellement un marché. La communication de l'Australie signale aussi que l'article 46 reste difficile à appliquer car il faut démontrer que l'entreprise a eu un comportement abusif dans un but illégal, et les tribunaux ne déduisent pas directement le but d'un comportement en s'appuyant sur celui-ci ou sur une preuve indirecte. Le Président invite la délégation australienne à indiquer quels ont été les effets des modifications apportées au champ d'application de la loi.

Le délégué de l'**Australie** explique que l'autorité de la concurrence (c'est-à-dire l'Australian Competition and Consumer Commission - ACCC) engage un très petit nombre de poursuites au titre de l'article 46. L'initiative vient le plus souvent de parties privées. Néanmoins, certaines procédures ont été récemment engagées sur l'initiative de l'ACCC dans ce domaine, et le délégué propose de décrire certaines d'entre elles en réponse aux questions du Président.

Le délégué mentionne tout d'abord l'affaire du pain *Safeway*, concernant une entente sur les prix, des prix imposés et l'utilisation du pouvoir de marché comme moyen de rétorsion. Selon l'accusation, lorsque les boulangeries ont refusé de suivre la politique de prix demandée par Safeway, cette entreprise a retiré tous leurs produits de ses rayons en guise de représailles. La deuxième affaire concerne la pratique de prix d'éviction sur le marché des parpaings. La troisième a trait au secteur de la ferraille et à l'utilisation du

pouvoir de marché à l'encontre d'entreprises ayant refusé de participer à un partage du marché. La quatrième affaire concerne elle aussi le partage du marché, avec l'utilisation par l'entreprise dominante de son pouvoir de marché à des fins de rétorsion. Sur ces quatre affaires, trois concernent des ententes horizontales s'accompagnant de mesures de rétorsion.

Pour appliquer l'article 46, il faut établir qu'une entreprise détient un pouvoir de marché substantiel et qu'elle l'a effectivement utilisé dans l'affaire considérée. Il est arrivé que les tribunaux parviennent à la conclusion qu'une entreprise avait utilisé autre chose que son pouvoir de marché pour commettre les actes en cause. Enfin, comme le Président l'a indiqué, il faut aussi établir que le comportement considéré a un but anticoncurrentiel. Il est naturellement très difficile de déterminer ce but, notamment lorsqu'il s'agit d'établir une distinction entre une concurrence vigoureuse et une pratique d'éviction. Dans la plupart des cas, il est nécessaire de déterminer l'intention par déduction, ce qui peut se révéler très difficile, notamment devant les instances de droit commun qui sont saisies d'un nombre relativement restreint d'affaires de concurrence.

L'affaire *Queensland Wire* de 1989, dont il est question dans la communication écrite, présente une nouvelle approche de la détermination de l'intention. Dans ce cas, on a considéré que l'intention pouvait être déduite d'un comportement auquel on ne s'attendrait pas de la part d'entreprises se trouvant dans un marché concurrentiel. Le délégué illustre cette situation en citant l'affaire concernant l'utilisation de prix d'éviction dans le secteur des parpaings. Dans ce cas, il existait deux acteurs établis, qui étaient tous deux des cimenteries verticalement intégrées. Il y avait également un certain nombre d'autres acteurs d'importance secondaire. Une nouvelle entreprise, utilisant une technologie meilleure et moins coûteuse, a fait son apparition sur le marché. La réaction de l'un des principaux acteurs a été de réduire fortement ses prix. Pour prouver qu'il s'agit de prix d'éviction, il faut établir que l'entreprise concernée dispose d'un pouvoir de marché substantiel et que son intention, en abaissant ses prix, est anticoncurrentielle. Les facteurs structurels pris en compte par l'ACCC sont les suivants : les deux principaux acteurs ont une réputation établie et une part de marché importante ; les entreprises d'importance secondaire ne peuvent imposer aucune condition aux principaux acteurs ; il existe des capacités excédentaires et certains acteurs secondaires sont en fait sortis du secteur ; les normes de produits sont influencées par les deux principaux opérateurs. S'ajoutent à ces facteurs structurels des facteurs comportementaux, notamment la réduction des prix. Il convient de noter que les tribunaux australiens ne donnent pas le même poids que certaines autres juridictions au fait que les prix aient été fixés à un niveau inférieur aux coûts variables moyens.

Dans l'affaire relative au marché des parpaings, certains autres comportements présentent des aspects intéressants. L'entreprise accusée de pratiquer des prix d'éviction a accru sa capacité alors que l'offre était déjà excédentaire et ce, en utilisant des technologies obsolètes. Elle a aussi contacté des clients actuels et potentiels de l'entreprise nouvellement arrivée sur le marché pour dénigrer ses produits. De plus, elle a offert de racheter cette nouvelle entreprise pour un prix surestimé. Enfin, certaines pratiques intéressantes ont été utilisées sur le plan des prix. Avant l'éviction supposée, l'autre acteur principal avait fait plusieurs déclarations publiques concernant le niveau des prix, les difficultés rencontrées et la nécessité de relever les prix. L'entreprise pratiquant les prix d'éviction aurait ainsi la possibilité de combler ses pertes une fois que le nouveau venu aurait été évincé du marché.

Dans cette affaire, les divers comportements observés pris individuellement ne permettent sans doute pas d'apporter la preuve de la pratique de prix d'éviction. Pris ensemble, en revanche, ils incitent fortement à penser qu'il y a eu une telle pratique. L'éviction par les prix est un comportement très coûteux. Pour réduire ses coûts, l'entreprise qui y a recours doit généralement adopter un certain nombre d'autres comportements. C'est en examinant ces autres comportements que l'autorité de la concurrence pourra sans doute déduire s'il y a eu fixation de prix d'éviction.

Le **Président** fait ensuite observer que l'article 6 et l'article 3(2) de la loi finlandaise sur la concurrence pourraient être utilisés pour mettre en cause des cas de coopération oligopolistique. La jurisprudence finlandaise révèle qu'il serait probablement difficile de mettre en évidence une entente tacite au moyen de simples preuves indirectes. Si la disposition concernant l'abus de position dominante était utilisée, l'autorité de la concurrence aurait à établir qu'il y a lieu une coopération délibérée et systématique, ce qui est difficile. La Finlande estime également que le problème des oligopoles n'a guère pris d'importance en raison de la récession qu'elle a connue depuis le début des années 90. En outre, les oligopoles finlandais sont généralement symétriques et bien informés de leurs prix et produits mutuels. Le Président estime que cette situation est intéressante dans la mesure où la communication de l'Allemagne donne à penser que la maturité d'une industrie, la baisse de la demande et la symétrie ont tendance à favoriser les comportements oligopolistiques.

Un délégué de la **Finlande** déclare que le peu d'attention accordée jusqu'à présent par son pays au problème des oligopoles tient à plusieurs raisons. La première est une question de priorités. Au cours des années 90, la nouvelle autorité de la concurrence a consacré la plus grande partie de ses ressources à des problèmes connus d'entente et de position dominante et à la déréglementation. La deuxième raison est liée au fait que la récession semble avoir rendu plus difficile le maintien d'ententes pour les oligopoles de certains secteurs. Chaque entreprise a dû se battre pour survivre. Ce faisant, nombre d'entre elles ont offert des rabais déguisés, ce qui a sapé la coordination oligopolistique. La troisième raison est liée aux modifications apportées en 1992 à la loi finlandaise sur la concurrence. A partir de cette date, les ententes et les abus de position dominante ont été strictement interdits, ce qui a sans doute dissuadé certains groupes d'avoir des comportements oligopolistiques.

Le **Président** appelle ensuite l'attention sur l'application, aux États-Unis, des articles 1 et 2 du Sherman Act et de l'article 5 de la loi sur la FTC aux problèmes soulevés par les oligopoles. S'agissant du Sherman Act, il semble qu'en vertu des articles 1 et 2, un ou plusieurs facteurs doivent être démontrés, c'est-à-dire qu'un comportement parallèle est insuffisant à lui seul pour établir l'existence d'un dispositif anticoncurrentiel illégal. Il est donc généralement très difficile de prouver l'existence d'une entente tacite. L'article 3 de la loi sur la FTC, qui interdit les pratiques unilatérales facilitant les ententes, peut apparemment être utilisé pour compléter le Sherman Act, comme l'illustre l'affaire *Ethyl*. La communication des États-Unis mentionne également l'affaire *Matsushita*, dans laquelle il a été décidé qu'en vertu des articles 1 ou 2 du Sherman Act, « … les plaignants doivent démontrer que la présomption de complicité est raisonnable par rapport aux présomptions d'actions indépendantes ou d'actions concertées qui n'auraient pas pu porter préjudice aux plaignants ». On peut donc considérer qu'en l'absence d'entente, les plaignants ne subissent pas de préjudice du fait d'un comportement oligopolistique. Cependant, du point de vue économique, on peut faire valoir que même dans un oligopole où il n'y a pas de coopération, on s'écarte de l'équilibre concurrentiel, d'où un certain préjudice à l'égard des consommateurs. Le Président cite également le passage de la communication dans lequel il est indiqué qu'à la suite du rappel par la Cour Suprême du principe suivant lequel une présomption d'entente horizontale doit avoir un fondement économique, les tribunaux vont sans doute de plus en plus demander qu'on leur démontre que le marché considéré est propice aux ententes. Le Président souhaite demander à la délégation des États-Unis de quelle manière les facteurs énoncés aux articles 1 et 2 du Sherman Act doivent être démontrés, et quel niveau de preuve doit être fourni pour démontrer qu'une pratique unilatérale, au sens de la loi sur la FTC, n'est pas justifiée par des intérêts commerciaux légitimes ?

La délégation des **États-Unis** commence par évoquer l'affaire *Matsushita* à propos de laquelle la Cour Suprême, par une ordonnance en référé, a rejeté les allégations selon lesquelles quelque six entreprises du secteur japonais de l'électronique grand public s'étaient concertées pendant une période d'une vingtaine d'années pour appliquer des prix peu élevés dans le but d'éliminer totalement l'industrie de l'électronique grand public des États-Unis. La Cour a estimé que les plaignants n'avaient pas démontré de théorie économique rendant leurs allégations suffisamment plausibles. Selon la Cour, il n'y avait pas de

preuve directe que les sociétés japonaises s'étaient concertées pour appliquer pendant une période de 20 ans des prix peu élevés dans le but d'obtenir une position dominante sur le marché américain. Cette ordonnance en référé a été rendue parce que les plaignants n'avaient pas présenté suffisamment de preuves à l'encontre de l'hypothèse économique suivant laquelle il aurait été irrationnel, pour ces entreprises, de se concerter pendant une période aussi longue pour évincer les entreprises des États-Unis. En outre, la pratique de prix peu élevés, dont elles étaient accusées, était parfaitement compatible avec un comportement économique indépendant et rationnel.

La Cour n'a pas estimé qu'un oligopole était une bonne chose, à condition qu'il n'y ait pas d'entente. Il est vrai cependant qu'un comportement oligopolistique et la pratique de prix parallèles en particulier ne sont pas en soi illégaux aux termes de la législation américaine sur la concurrence. En outre, il ne faut pas déduire de l'affaire *Matsushita* qu'en présence d'un comportement oligopolistique, les consommateurs se trouvent dans une situation plus favorable ou non moins favorable qu'en présence d'une concurrence vigoureuse.

Si la pratique de prix parallèles doit être accompagnée d'un ou plusieurs autres facteurs pour être jugée illégale, c'est parce que l'on ne peut manifestement pas obliger les entreprises à éviter de façon irrationnelle de pratiquer des prix parallèles non coordonnés dans le seul but d'éviter d'être poursuivies au titre de la législation antitrust. Cependant, si l'existence d'autres facteurs qu'une simple pratique de prix parallèles peut être démontrée de façon persuasive, on peut conclure qu'il y a entente. Aucune formule simple ne permet de déterminer quels doivent être ces facteurs supplémentaires dans une situation donnée. Le fait que des membres d'une branche d'activité se réunissent régulièrement dans la même salle, qu'ils échangent certains types d'informations et qu'il y ait des antécédents d'ententes dans le secteur concerné peut inciter à penser, pour chacun de ces faits, qu'il y a collusion. Dans bien des cas, il est extrêmement important de démontrer qu'il aurait été irrationnel, pour les entreprises considérées, de se comporter comme elles l'ont fait s'il n'y avait pas eu entre elles une entente. Rien ne dit cependant que la présence d'un facteur aggravant dans un cas particulier permettra d'apporter la preuve requise. Dans ce type de cas, qui fait généralement l'objet d'une procédure civile et non pénale, la charge de la preuve consiste à donner à penser que le comportement considéré s'explique plus par une entente que par une action indépendante.

Un autre délégué des États-Unis répond à la question du Président concernant l'article 5 de la loi sur la FTC et le niveau de preuve requise pour démontrer qu'une pratique unilatérale n'est pas justifiée par des motifs commerciaux légitimes. Cet article interdit « les méthodes de concurrence déloyale » et autorise la FTC à aller au-delà du Sherman Act et du Clayton Act. Le niveau de preuve requise dépend des circonstances propres de l'affaire et de la branche d'activité considérées. Lorsqu'il n'y a pas d'accord explicite ou implicite, couvert par le Sherman Act, la FTC pose un certain nombre de questions. Peut-on apporter la preuve d'une intention ou d'un but anticoncurrentiel de la part du producteur ? N'y a-t-il pas de raisons commerciales légitimes et indépendantes pour justifier le comportement, le rendant avantageux pour les consommateurs ? Y a-t-il des éléments qui prouvent clairement que le comportement a des effets anticoncurrentiels ? Enfin, naturellement, peut-on considérer ou prouver que le marché est un oligopole ? Pour trouver des réponses à ces questions, la FTC peut examiner un certain nombre d'éléments tels que les signaux de prix, les fermetures d'usines et réductions de la production d'une entreprise, jointes à des achats de stocks inhabituels auprès d'un concurrent, et l'utilisation de la clause de la nation la plus favorisée.

Pour illustrer l'application de l'article 5 de la loi sur la FTC, le délégué se réfère à l'affaire concernant les préparations pour nourrissons. En 1990, le ministère de l'agriculture a lancé un appel d'offres par l'intermédiaire de quelques Etats pour ce type de préparation, les soumissions devant être présentées sous pli cacheté. Trois entreprises, Abbott Laboratories, American Home Products et Mead Johnson représentaient 90 pour cent du marché. Selon les allégations de la FTC, ces entreprises ont communiqué des informations à leurs concurrents pour les avertir de leurs préférences et de leurs intentions lors de leurs offres sous pli cacheté. Plus précisément, la société Mead Johnson a adressé des

lettres à quelques États indiquant le montant des offres qu'elle avait l'intention de proposer sous pli cacheté pour les futurs marchés. La FTC a fait valoir qu'aucune raison commerciale légitime ne pouvait justifier l'envoi de telles lettres, révélant par avance leur stratégie d'offre. Les États ne les avaient pas sollicitées. En fait, être informé d'un prix avant la soumission d'une offre sous pli cacheté compromet le but concurrentiel de tout le processus. De plus, la FTC a considéré que Mead Johnson savait ou aurait dû savoir que le contenu de ces lettres serait porté à l'attention de ses concurrents, et que c'était en fait arrivé, ce qui réduirait la concurrence.

Le **Président** en vient ensuite à l'Italie, pays où il est peut-être un peu plus facile d'utiliser des preuves indirectes pour démontrer l'existence d'une entente oligopolistique illégale. Il fait observer que l'autorité de la concurrence italienne ne semble pas avoir largement recours à ce type de preuve. Par ailleurs, l'article 2 de la loi italienne sur la concurrence stipule que toute pratique facilitant un comportement est elle aussi interdite. Cela revient à élargir le champ d'application des preuves indirectes. Parmi les quatre affaires présentées dans la communication italienne, l'affaire *Gardes de sécurité*, concernant des adjudications, occupe une place prédominante. Contrairement à l'affaire américaine relative aux préparations pour nourrissons, celle-ci n'a pas permis d'établir l'existence d'une entente, faute de preuve pertinente.

Un délégué de l'**Italie** note tout d'abord que les quatre affaires citées dans la communication de son pays présentent une même caractéristique, qu'un économiste éminent, Lewis Phlips, juge très importante comme facteur susceptible d'accroître la probabilité d'un équilibre collusoire. Chacun des marchés pertinents compte moins de cinq fournisseurs.

Dans l'affaire *Gardes de sécurité*, concernant la Sardaigne, aucune preuve pertinente ne permettait de conclure avec certitude qu'il y avait une entente. Dans les trois autres cas, en revanche, d'amples échanges d'informations avaient eu lieu. Ces échanges d'informations n'étaient peut-être pas nécessaires dans l'affaire *Gardes de sécurité*. Celle-ci concernait un marché très réglementé -- dans lequel le nombre d'entreprises et leur capacité (nombre de gardes) étaient fixés par voie de règlement. Les services de gardes de sécurité font l'objet d'adjudications, si bien qu'il n'y a pas de contrats privés. Entre 1990 et 1995, la clientèle respective des quatre principales sociétés est restée parfaitement stable en Sardaigne. De plus, lorsque l'autorité de la concurrence a comparé la valeur des soumissions faites pour différents marchés, il est apparu clairement que les sociétés concernées avaient décidé de ne pas se faire mutuellement concurrence. En soumissionnant pour le renouvellement d'un contrat, elles présentaient des offres systématiquement inférieures à celles qu'elles présentaient à des clients qui faisaient jusqu'alors appel aux services d'un concurrent. En outre, lorsqu'un prestataire d'importance secondaire avait des capacités excédentaires et soumissionnait pour un marché, les principales entreprises présentaient des offres anormalement basses. L'autorité de la concurrence a obtenu des informations concernant 106 soumissions. Ce comportement a pu être observé dans la totalité des adjudications. L'autorité a fait valoir que ce comportement ne pouvait pas être attribuable à des choix indépendants des entreprises en cause. Il ne pouvait s'agir que du résultat d'une pratique concertée ou d'une entente entre les entreprises. L'autorité a de ce fait infligé des amendes aux quatre grandes entreprises. Bien que ces amendes aient ensuite été suspendues par le Conseil d'État pour des motifs de procédure, la décision de l'autorité a été acceptée sur le fond.

Le délégué italien note enfin que le marché des *Gardes de sécurité* se caractérisait par une transparence totale. Il n'aurait pas pu y avoir de soumissions secrètes, car toutes les offres pouvaient être consultées après l'adjudication. C'est la raison pour laquelle un échange d'informations entre les entreprises aurait été superflu. En outre, dans ce cas précis, les mêmes entreprises se sont concertées à plusieurs reprises, ce qui a renforcé leur volonté et leur capacité de coordonner leur comportement.

La communication de la Corée est ensuite examinée. Le **Président** fait observer que l'article 19(5) du règlement sur les monopoles et de la loi sur la concurrence autorise la Commission coréenne de la concurrence à présumer qu'il y a entente dans certaines circonstances. La communication de la Corée présente un exemple concernant la production et la vente de papier. Le Président demande à la Corée d'expliquer la teneur de l'article 19(5) et d'en décrire l'utilité.

Le délégué de la **Corée** fait observer que la Commission coréenne de la concurrence tient compte de quatre facteurs dans l'application de l'article 19(5). Le premier est la preuve de communications ou d'échanges d'informations directs ou indirects. Les directives concernant la concurrence donnent un certain nombre d'exemples détaillés : coïncidence dans la date et la teneur des notifications concernant les augmentations de prix, comportement parallèle à l'issue d'une réunion à huis clos, accords concernant l'échange d'informations sur les prix et la production et réunions périodiques ayant les mêmes objectifs. Le deuxième facteur dépend de savoir si l'accord supposé serait contraire aux intérêts de chacune des parties prises individuellement s'il n'était pas exécuté de façon concertée. Des doutes peuvent être justifiés si les entreprises considérées majorent uniformément leurs prix uniformes en l'absence d'augmentation des coûts et malgré une offre excédentaire sur le marché. Le troisième facteur est présent lorsque le comportement n'est pas justifié en termes d'objectifs commerciaux. Par exemple, des modifications de prix ne sont pas justifiables lorsque leur amplitude est identique alors que les coûts de fabrication varient. Le dernier facteur pris en compte est celui d'une structure de branche ou d'une situation du marché excluant toute possibilité de coïncidence accidentelle. Cette situation peut se présenter, par exemple, lorsque la différenciation des produits a très fortement progressé ou lorsque les acheteurs n'ont pas les moyens d'exiger un prix uniforme.

Le délégué de la Corée termine son intervention par une description de l'affaire mentionnée dans la communication écrite de son pays. Celle-ci concerne trois entreprises, détenant collectivement 90 pour cent du marché du papier journal et 80 pour cent du papier d'impression pour les livres. Ces entreprises ont relevé leurs prix à trois reprises en l'espace d'une année, pratiquement aux mêmes dates et dans les mêmes proportions. Par ailleurs, certaines communications ont eu lieu entre elles. La Commission de la concurrence n'a donc eu aucune difficulté à présumer l'existence d'une entente tacite. Cependant, la principale entreprise a fait valoir que ces relations s'expliquaient par le pouvoir de négociation de l'Association coréenne des journaux. La Commission de la concurrence a rejeté cet argument car elle a estimé qu'il aurait été très difficile, même pour l'Association coréenne des journaux, d'exercer son pouvoir à l'encontre d'un oligopole représentant près de 90 pour cent du marché. Par ailleurs, les trois entreprises sont parvenues à relever leurs prix à trois reprises en un an. Enfin, et c'est là la principale raison invoquée pour rejeter leur argument, les entreprises du marché de la presse écrite avaient des stocks qui ne dépassaient pas une journée de production. Des stocks aussi faibles étaient courants en Corée à l'époque.

Le **Président** appelle ensuite l'attention sur l'article 18-2 de la loi antimonopole du Japon. Cet article donne à la Commission de la concurrence japonaise des pouvoirs d'investigation spéciaux en cas d'augmentation parallèle des prix pratiqués par des entreprises appartenant à une branche caractérisée par un oligopole. Comme cela est indiqué dans la communication du Japon, lorsque le prix annuel total des produits ou services d'une branche d'activité donnée dépasse 60 milliards de yen et que la part de marché totale des trois principales entreprises est supérieure à 70 pour cent, si deux ou plusieurs entreprises (y compris la plus importante) majorent leurs prix d'un montant ou d'un pourcentage identique ou comparable dans une période de trois mois, la Commission peut demander aux principales entreprises d'indiquer les raisons qui motivent ces relèvements des prix de leurs produits ou de leurs services. Les conclusions de la Commission doivent figurer dans son rapport annuel présenté à la Diète. Le Président souhaite savoir avec quelle efficacité cette procédure permet d'éviter une coordination oligopolistique. Il se demande par ailleurs si elle n'est pas contre-productive dans la mesure où elle peut sensiblement accroître la transparence du marché, et donc favoriser une coordination oligopolistique.

Un délégué du **Japon** fait observer que l'article 18-2 concerne les augmentations de prix parallèles dans les branches caractérisées par les oligopoles. Cet article n'a probablement pas d'équivalent dans les autres pays de l'OCDE. Il est décrit en annexe à la communication écrite du Japon. Son objet est d'améliorer la transparence de la formation des prix dans les marchés oligopolistiques, d'encourager les entreprises concernées à faire preuve de prudence dans leurs décisions en matière de prix et de contribuer à la promotion d'une concurrence loyale et libre sur les marchés oligopolistiques. Le délégué du Japon estime que cet article a un certain effet dissuasif, qu'il est toutefois difficile de mesurer.

Le délégué du Japon ne pense pas que le système de notification risque de faciliter les ententes oligopolistiques car les principaux points des rapports exposant les raisons des relèvements de prix ne sont rendus publics qu'une fois que toutes les procédures utiles ont été menées à leur terme par la Commission de la concurrence, c'est-à-dire plusieurs mois après les hausses de prix. Le délégué ajoute que l'article 18-2 ne se substitue pas aux enquêtes officielles sur les ententes ou sur d'autres activités horizontales anticoncurrentielles. Si la Commission de la concurrence obtient suffisamment d'informations pour prouver l'existence d'une entente, elle prendra bien entendu les mesures juridiques qui s'imposent pour y mettre un terme.

Le **Président** passe ensuite à la communication de la Suède, dans laquelle ce pays reconnaît qu'il est difficile d'appliquer aux situations d'oligopole les interdictions visant les abus de position dominante ou les ententes. La Suède accorde une attention particulière aux problèmes qui se posent dans les industries de réseau à caractère oligopolistique et s'efforce de les résoudre en appliquant le concept de facilité essentielle. Le Président souhaite avoir davantage d'informations sur ce point.

Un délégué de la **Suède** indique que l'autorité de la concurrence suédoise ne s'oppose pas à la tendance internationale à s'écarter de plus en plus du concept de facilité essentielle. Il reconnaît qu'il est généralement préférable de s'orienter dans une direction opposée, c'est-à-dire d'encourager plutôt que de décourager la concurrence au niveau des installations. Il remarque également que l'on note une tendance générale à une application croissante de l'article 86 aux marchés oligopolistiques, au détriment de l'utilisation de mesures « offensives » telles qu'un contrôle des prix ou la cession obligatoire de certaines activités. Cette dernière mesure n'a jamais été utilisée en Europe. Il note par ailleurs une tendance à utiliser de plus en plus des mesures « défensives » comme le contrôle des fusions et l'interdiction des pratiques d'éviction pour préserver la structure du marché.

S'agissant en particulier des industries de réseau comme les guichets automatiques de banque, il semble probable qu'elles prendront de l'importance même si les monopoles naturels traditionnels continuent de perdre du terrain. Dans ces industries de réseau, les entreprises peuvent être incitées à créer des groupes fermés réservés aux grandes entreprises et excluant les petites entreprises rivales. Il se peut aussi que la fixation mutuelle des prix d'accès soit utilisée à des fins de coordination. Les mesures classiques sont souvent mal adaptées à la résolution de ce type de problème et il peut exister des situations dans lesquelles une ouverture obligatoire de l'accès permettrait de tirer parti des avantages offerts par un réseau et par la concurrence.

Dans les autres branches d'activités, les entreprises sont incitées à créer des ententes, mais aussi à ne pas en respecter les règles. Dans les industries de réseau, en revanche, rien n'incite une entreprise donnée à ne pas respecter des accords explicites ou tacites visant à exclure certains acteurs. En particulier, aucune entreprise n'aura individuellement intérêt à permettre à une petite entreprise rivale de faire partie du réseau.

Le **Président** ayant ouvert le débat général, l'**Allemagne** fait observer qu'elle applique certaines présomptions juridiques aux situations oligopolistiques et souhaiterait savoir si c'est également le cas dans d'autres pays. Le **Président** rappelle aux délégués les présomptions générales appliquées par la Corée.

Un délégué du **Canada** demande alors à la délégation suédoise si ses observations s'appliquent aux industries de réseau en général ou exclusivement aux industries de réseau à caractère oligopolistique. Un délégué de la **Suède** répond qu'il s'agit plutôt du second cas, notant que de nombreuses industries de réseau sont en fait de parfaits exemples d'industries oligopolistiques.

Un délégué de l'**Allemagne** revient sur la question des réseaux et de l'application du concept de facilité essentielle. Étant donné que les réseaux prennent de plus en plus d'importance dans l'économie mondiale, les responsables de la concurrence devront probablement s'attaquer à ce problème à l'avenir. Ils pourraient essayer d'imposer une déconcentration verticale, mais cela se révélerait sans doute très compliqué, coûteux et impraticable. La notion de facilité essentielle pourrait apporter une réelle solution à ce problème car elle permet d'éviter le démantèlement tout en obligeant le propriétaire d'un réseau à en accorder l'accès, pour un prix raisonnable, aux nouveaux venus. Naturellement, le problème est de déterminer un prix raisonnable. Le délégué note également que l'Allemagne a probablement été le premier pays à introduire le concept de facilité essentielle dans sa législation sur la concurrence. Cette notion figure dans les dispositions concernant l'abus de position dominante.

Le **Président** rappelle aux délégués la précédente table ronde du CLP sur les facilités essentielles et fait observer que le compte rendu de ce débat est disponible sur l'Internet, à l'adresse « http://www.oecd.org/daf/clp/CLP-PUB.HTM ».

Un délégué du **Danemark** fait remarquer que les oligopoles peuvent être utiles ou nuisibles. Le débat a jusqu'à présent été axé sur les moyens de remédier aux oligopoles nuisibles. Le Danemark a récemment étudié la relation entre la concentration et la densité de la recherche-développement. Comme dans les études réalisées ailleurs, cette relation s'inscrit sur une courbe en U inversé. Quelques-unes des entreprises qui consacrent le plus de ressources à la recherche-développement appartiennent à des branches où le niveau de concentration est modéré. Un niveau de concentration trop élevé semble nuire à la recherche-développement, mais une certaine concentration semble être nécessaire. D'un point de vue technique, la propension à exercer des activités de R-D atteint un maximum dans les branches d'activités où l'indice Herfindahl-Hirschman est d'environ 1000 (c'est-à-dire le niveau que l'on observerait s'il y avait dix entreprises de taille égale). Si l'on accepte qu'une certaine concentration est utile mais qu'une trop grande concentration est nuisible, la question se pose de savoir comment déterminer le niveau auquel se produit le changement. Le **Président** précise ensuite qu'une courbe en U inversé a été observée à plusieurs reprises dans d'autres pays et mentionne à ce propos les travaux du Professeur Scherer. Il peut effectivement y avoir un arbitrage entre efficience statique et efficience à long terme, ou dynamique.

Le délégué du **Danemark** signale aussi que des entreprises peuvent se réunir pour examiner des questions qui ne sont pas nécessairement anticoncurrentielles, par exemple des normes et garanties communes. De telles réunions peuvent être propices au développement d'ententes. Il peut y avoir un arbitrage entre des objectifs de concurrence et des dispositifs qui semblent avantageux pour les consommateurs ou pour l'environnement.

2. Outils structurels

Le **Président** ouvre la deuxième partie de la table ronde en évoquant les difficultés auxquelles se heurtent les autorités de la concurrence dans l'utilisation de dispositions destinées à sanctionner des accords ou des abus de pouvoir de monopole afin de lutter contre les pratiques oligopolistiques coordonnées. Une solution à cet égard consiste, dans certains pays du moins, à utiliser le contrôle des fusions pour éviter l'apparition de structures oligopolistiques. Le contrôle des fusions présente deux avantages potentiels par rapport aux mesures comportementales. Premièrement, les organismes responsables de la concurrence peuvent examiner les fusions en s'appuyant sur la probabilité d'une

coordination oligopolistique, et non sur son existence effective. Deuxièmement, les moyens d'action utilisés dans le contrôle des fusions ont un caractère préventif et ne visent pas à réduire les préjudices qui se matérialisent déjà. Malheureusement, ce moyen d'action soulève lui-même des problèmes et des difficultés spécifiques. Le premier d'entre eux concerne la norme à appliquer. Certains pays cherchent à mettre en évidence une position dominante, d'autres à prouver que la concurrence est sensiblement réduite, et ces deux méthodes peuvent parfois aboutir à des résultats différents. En outre, comme cela est indiqué dans les communications de nombreux pays, il peut arriver que des structures oligopolistiques ne se traduisent pas nécessairement par une coordination oligopolistique. Le contrôle des fusions doit-il viser à empêcher toutes les situations d'oligopole ou seulement celles qui risquent d'aboutir à une coordination oligopolistique ? La plupart des pays choisissent la seconde approche, mais celle-ci soulève elle aussi certains problèmes difficiles en termes de preuves. Enfin, se pose la question de savoir quel type de mesure il convient d'appliquer dans le contrôle des fusions. Le démantèlement ou la création d'un plus grand nombre d'entreprises sont-ils toujours une bonne solution ?

Le **Président** note que la Nouvelle-Zélande ne dispose pas pour l'instant d'outils lui permettant de s'attaquer aux ententes tacites dans des situations oligopolistiques, mais qu'elle envisage de s'en doter. Le ministère du commerce a récemment diffusé un document de travail proposant de remédier à cette situation. Il exprime une préférence pour le contrôle des fusions, par opposition aux outils comportementaux. La Nouvelle-Zélande estime apparemment que l'on risque davantage de commettre des erreurs en utilisant des outils comportementaux plutôt que des outils structurels dans le cas des oligopoles. Le Président demande à la Nouvelle-Zélande de préciser sa position à cet égard.

Le délégué de la **Nouvelle-Zélande** donne deux raisons pour expliquer pourquoi le ministère du commerce hésite à recommander la modification d'articles concernant les accords et ententes anticoncurrentielles pour traiter le problème des ententes tacites. Premièrement, l'uniformité des prix peut être le résultat normal d'un comportement économique rationnel sur des marchés où il y a peu de vendeurs et où les produits sont homogènes. Il convient donc d'insister sur la nécessité de mettre en évidence des communications entre les concurrents avant de pouvoir considérer qu'il y a infraction. Les preuves indirectes d'un comportement parallèle ne sont pas suffisantes. Deuxièmement, comme le fait observer le Secrétariat aux paragraphes 13 et 14 de son document de référence, il est très difficile de concevoir des remèdes adaptés pour lutter contre les pratiques de coordination qui ne vont pas jusqu'à l'entente expresse. Une décision d'un tribunal ou d'une autorité de la concurrence qui obligerait les parties à un oligopole à ne pas tenir compte des réalités économiques du marché dans lequel elles opèrent serait parfaitement vaine. La réglementation des prix est un moyen d'action possible, mais elle présente aussi de sérieux problèmes. En plus d'un risque important d'inefficacité réglementaire, elle implique un contrôle continu de la part de l'autorité de la concurrence. L'autorité de la concurrence néo-zélandaise, comme ses homologues des autres pays, préfère consacrer les précieuses ressources dont elle dispose à d'autres questions. Pour résumer, le ministère du commerce estime que les outils comportementaux impliquent en général des coûts tellement importants que le remède serait pire que le mal.

En ce qui concerne le contrôle des fusions, en vertu de la loi néo-zélandaise sur le commerce, les seules fusions qui sont expressément interdites sont celles qui créent ou renforcent une position dominante. La position dominante conjointe est clairement exclue. Si les autorités décidaient de modifier la législation, la meilleure option serait d'interdire les fusions qui risquent de restreindre la concurrence, comme cela se fait aux États-Unis et en Australie. Le délégué de la Nouvelle-Zélande convient avec le Président que des erreurs peuvent certainement être commises dans le contrôle des fusions, étant donné qu'un comportement anticoncurrentiel est loin d'être inévitable dans les oligopoles. Le ministère du commerce pense qu'à en juger par l'expérience de l'Australie, les changements juridiques proposés ne devraient pas entraîner d'augmentation importante du nombre de fusions soumises à l'autorité de la concurrence, c'est-à-dire à la Commission du commerce. En outre, le ministère a estimé que la législation devra éviter d'être trop prescriptive. Les tribunaux et la Commission du commerce doivent conserver la marge de manœuvre

nécessaire pour évaluer comme il convient les effets probables des fusions et pour tenir compte des réalités du marché cas par cas. Le ministère du commerce a aussi recommandé que la Commission du commerce établisse des lignes directrices pour les fusions afin de préciser le cadre analytique à utiliser pour déterminer si elles sont susceptibles d'accroître le risque d'entente explicite ou tacite. La communication écrite de la Nouvelle-Zélande définit quelques-unes des caractéristiques générales à prendre en compte, comme le fait le document du Secrétariat aux paragraphes 27-65. Le ministère du commerce pense que l'analyse des treize facteurs identifiés pourrait servir de base à la prise en compte des oligopoles dans les lignes directrices générales concernant les fusions.

Le **Président** passe ensuite à l'Australie, en évoquant une modification apportée en 1993 à l'article 50 de la loi sur les pratiques commerciales. Depuis, pour analyser les fusions, ce n'est plus la position dominante d'une seule entreprise qui est prise en compte, mais la réduction sensible de la concurrence. La communication de l'Australie examine l'arbitrage entre le contrôle des fusions et les outils comportementaux. Plus il est difficile d'appliquer des outils comportementaux, plus il importe d'essayer d'éviter que des problèmes apparaissent dès le départ dans le contexte des oligopoles. La communication de l'Australie examine aussi un certain nombre de fusions ayant eu lieu avant et après la modification de 1993. Le Président invite les délégués à formuler des commentaires, notamment sur le projet de regroupement *Wattyl/Taubmans*. Il aimerait aussi savoir si, dans ce cas, l'application du principe de position dominante aurait abouti à un résultat différent.

Un délégué de l'**Australie** explique qu'en 1986, son pays a remplacé le critère d'abus de position dominante, jusqu'alors applicable aux entreprises, par un critère applicable aux entreprises ayant un pouvoir de marché dans une situation d'oligopole. Après cela, en 1993, pour l'examen des fusions, le critère de position dominante a été abandonné au profit de la notion de réduction sensible de la concurrence. La raison en est, premièrement, que par principe il semble clair que le droit de la concurrence s'applique à toute fusion qui réduit sensiblement la concurrence, même si elle ne donne pas lieu à une position dominante. Deuxièmement, le critère de réduction sensible de la concurrence va dans le même sens que le reste de la législation, qui interdit les comportements anticoncurrentiels, comme les ententes. En outre, un certain nombre de fusions ont eu lieu après que des accords de fixation des prix entre concurrents aient été interdits, ce que l'Australie souhaitait empêcher. Troisièmement, l'Australie a préféré des outils structurels à une réglementation des comportements. Le délégué fait observer incidemment qu'en Australie, la plus grande partie des travaux futurs au titre de la politique en matière de fusions concerne les domaines déréglementés dans lesquels les fusions sont actuellement très nombreuses. L'Australie estime qu'il est particulièrement important, dans ces secteurs, de disposer d'une législation appropriée en matière de fusions, faute de quoi bon nombre des effets favorables de la déréglementation risquent d'être neutralisés par les fusions.

Au cours du débat animé qui a concerné les réformes de 1993, le gouvernement avait approché l'ACCC et exprimé des réserves au sujet de l'adoption du critère de réduction sensible de la concurrence. Il avait été demandé à l'ACCC si un moyen terme ne pourrait pas être trouvé sur la base du concept de position dominante collective. A l'issue d'un certain nombre d'enquêtes, l'ACCC a conclu que s'orienter dans cette direction inciterait les tribunaux à mettre l'accent de façon excessive sur les possibilités d'entente, ce qui provoquerait sans doute des confusions sur le plan juridique. La position dominante conjointe est un autre concept qui a été proposé, mais dans le vocabulaire juridique, « conjoint » désigne généralement deux entités seulement. L'ACCC a donc opté pour le concept de réduction sensible de la concurrence. Comme l'a fait observer la Nouvelle-Zélande, il n'y a pas eu de changement important dans la proportion de fusions notifiées à l'ACCC ou interdites par celle-ci, sauf les premières années, lorsque les entreprises ont dû s'habituer aux nouvelles dispositions. Il est probable, cependant, qu'un certain nombre de fusions qui auraient été envisagées auparavant n'ont plus lieu aujourd'hui.

Si l'on examine l'application de la législation concernant la position dominante, il est manifeste que certaines fusions qui ont eu lieu au cours des années 80 n'auraient pas été possibles si l'on avait appliqué le concept de réduction sensible de la concurrence. Des pressions considérables se sont exercées en Australie en faveur de l'adoption de mesures de démantèlement dans le cadre du droit de la concurrence, en partie pour mettre un terme à certaines de ces fusions. Des outils comportementaux ont aussi été recommandés pour lutter contre elles.

Quant à la fusion *Wattyl/Taubmans*, il s'agit d'une opération classique de regroupement de trois entreprises en deux entités. Il y avait une entreprise en position dominante qui détenait 45 pour cent des parts de marché. Les deuxième et troisième entreprises, détenant respectivement 27 pour cent et 19 pour cent des parts de marché, ont proposé de fusionner. L'opération se serait soldée par la mise en présence de deux acteurs détenant chacun environ 45 pour cent du marché. La question qui se posait était de savoir si cela aurait pour effet de renforcer ou d'affaiblir la concurrence. Les entreprises concernées ont fait valoir que la fusion était nécessaire pour créer un deuxième acteur capable de soutenir la concurrence de la première entreprise. Inversement, l'argument a été avancé que cela donnerait naissance à un duopole incontesté. L'ACCC a tout d'abord consulté tous les manuels concernant la théorie des jeux et n'y a guère trouvé d'éléments utiles. Elle s'est alors tournée vers le marché et a posé de nombreuses questions. Finalement, elle a conclu que cette fusion aurait sans doute pour effet de réduire la concurrence. Il est apparu qu'il y avait des obstacles à l'entrée assez élevés sur le marché de la peinture et que les importations étaient négligeables. Il y avait une concurrence importante entre les sociétés qui proposaient de fusionner, ce qui avait un effet sur la concurrence dans l'ensemble du secteur. L'ACCC a donc décidé de s'opposer à la fusion. Elle a été confortée dans cette idée en voyant par la suite la réalisation d'une fusion entre la troisième et la quatrième entreprise. Chacune d'entre elles avait de véritables faiblesses que la fusion a contribué à atténuer. Ainsi, un troisième acteur important a fait son apparition, si bien que la concurrence s'est encore renforcée sur le marché de la peinture. L'ACCC n'a rien fait pour favoriser cette évolution et ne croit pas, d'une manière générale, à l'utilité de ce genre d'intervention.

Le **Président** se tourne ensuite vers le Canada, notant qu'en vertu de l'article 92 de la loi sur la concurrence, les fusions peuvent être bloquées par le Tribunal de la concurrence si celui-ci conclut qu'un "fusionnement réalisé ou proposé empêche ou diminue sensiblement la concurrence, ou aura vraisemblablement cet effet". Cette disposition concerne à la fois les effets unilatéraux et les effets coordonnés anticipés désignés par l'expression « comportement interdépendant ». Le Président a un peu de mal à comprendre cette terminologie. Pour lui, un comportement interdépendant signifie qu'il n'y a pas d'entente, tandis que des effets coordonnés signifient qu'il y a entente. Sa première question à la délégation canadienne concerne la question de savoir quel type d'oligopole le Canada essaie d'éviter par le contrôle des fusions et si tous les oligopoles, ou seulement ceux qui conduisent ou risquent de conduire à des pratiques coordonnées, sont concernés. Par ailleurs, il souhaite savoir pourquoi très peu de fusions ont été contestées au Canada et si cela signifie que les dispositions concernant les fusions ne sont guère utiles pour lutter contre les oligopoles.

Un délégué **canadien** fait tout d'abord observer qu'un comportement interdépendant a le même sens que des effets coordonnés. En ce qui concerne la seconde question, le Bureau de la concurrence examine périodiquement avec les parties intéressées, sur une base volontaire, les problèmes que soulèvent les projets de fusion. Il arrive que de sérieux problèmes ne puissent pas être résolus par les parties, mais au lieu de risquer de se voir contester par le Tribunal de la concurrence, celles-ci décident d'abandonner leur projet. C'est là l'une des principales raisons qui expliquent pourquoi si peu de fusions susceptibles de se traduire par un comportement interdépendant ont été contestées.

Dans la suite du débat général, le même délégué évoque les difficultés pratiques que soulèvent les cas dans lesquels coexistent des effets oligopolistiques et des gains d'efficience. En vertu de la législation canadienne, un fusionnement qui empêche ou diminue sensiblement la concurrence ne peut être interdit si

des gains d'efficience viennent compenser ces inconvénients. Il peut se révéler très difficile de tenir compte de ces divers éléments devant les tribunaux. Les effets anticoncurrentiels supposés paraissent généralement beaucoup plus hypothétiques que les gains d'efficience escomptés.

Le **Président** souhaite ensuite poser des questions à la délégation des États-Unis. Il fait observer que le contrôle des fusions peut être utilisé aux États-Unis pour empêcher les fusions qui risquent de se traduire par une coordination entre les entreprises, et qu'il peut donc servir à empêcher la création ou le renforcement d'oligopoles. La communication des États-Unis indique que les tribunaux essaient généralement de déterminer si la fusion crée un marché qui peut donner lieu à une coordination et/ou si elle accroît sensiblement le risque d'un tel comportement. Le Président souhaiterait à ce propos connaître l'importance relative des facteurs propres à une fusion, par opposition à ceux qui sont propres à une branche d'activités, dans l'évaluation du risque de coordination après fusion. Il souhaite également savoir à partir de quel risque de coopération une fusion peut être empêchée.

Un délégué des **États-Unis** note tout d'abord qu'en plus d'une augmentation de la part de marché, les principaux facteurs qui peuvent accroître la probabilité d'une coordination sont les suivants : niveau de concentration élevé parmi les fournisseurs, homogénéité des produits, inélasticité de la demande, similitude des structures de coûts, et transparence des prix. Un autre facteur important est l'existence possible d'une tradition d'ententes dans une branche d'activité donnée et à l'efficacité de ces ententes. Lorsque les conditions du marché permettent de détecter et d'éviter rapidement les tentatives de "déviation" de la part d'une partie à un oligopole sans enfreindre les règles, l'entreprise considérée peut avoir intérêt à respecter les conditions de la coordination plutôt que de s'en écarter. Par exemple, il sera difficile, pour une entreprise, de s'écarter de ces règles avec succès ou en secret si des informations importantes sur les transactions, les prix ou les niveaux de production sont mises à la disposition de ses co-conspirateurs ou si les fluctuations de la demande ou des coûts sont relativement rares.

Lorsque des fusions ont été autorisées alors même que le risque de coordination se trouvait accru, c'est parce que ce risque n'a pas été jugé suffisamment important pour justifier l'interdiction de la fusion. Cette question ne peut être examinée de façon plus approfondie dans le contexte de tout arrêt spécifique car les États-Unis ont pour politique de ne pas révéler si l'autorité de la concurrence mène une enquête confidentielle sur une fusion et même si les entreprises ont déposé un dossier à titre préliminaire. Le délégué note cependant que les gains d'efficience sont également pris en compte dans la décision d'autoriser une fusion et mentionne également le rôle modérateur des francs-tireurs (c'est-à-dire les entreprises qui cassent les prix pour obtenir une part de marché). Certes, les gains d'efficience ne peuvent pas justifier une fusion donnant lieu à un monopole ou à un quasi-monopole, mais, s'ils sont réels et prouvés, ils peuvent aider à justifier une fusion dans un marché moins concentré, même si la concentration suscite des préoccupations au départ.

Le délégué des États-Unis explique comment la FTC a contesté deux fusions horizontales en faisant valoir l'argument d'une interaction coordonnée entre les quatre principaux grossistes distribuant des produits pharmaceutiques aux États-Unis, à savoir le regroupement de McKesson et AmeriSource et celui de Cardinal Health et Bergen-Brunswig. L'année passée, la FTC a engagé devant un tribunal fédéral de première instance une demande de procédure de référé, faisant valoir que si les regroupements étaient autorisés, les sociétés impliquées contrôleraient plus de 80 pour cent du marché en gros des médicaments délivrés sur ordonnance, réduisant ainsi de façon sensible la concurrence en matière de prix et de services. Le tribunal a suspendu les regroupements proposés bien que les parties concernées aient fait valoir qu'ils se traduiraient par des gains d'efficience supérieurs à toute augmentation du risque de coordination. Ces gains d'efficience concernaient la distribution, une amélioration des pratiques en matière d'achats et une réduction des frais généraux et des stocks. Tout en rejetant la plupart de ces arguments, le juge a reconnu que les fusions engendreraient certains gains d'efficience. Cependant, il a finalement conclu que ces gains seraient insuffisants pour compenser les effets anticoncurrentiels des regroupements. Trois des quatre

sociétés considérées avaient passé avec un important groupement d'achat du secteur hospitalier des contrats dont certaines dispositions semblaient leur garantir des prix favorables. Il est apparu, cependant, que ces dispositions avaient pour effet de fixer un seuil pour les prix que les défendeurs offriraient aux autres hôpitaux et groupements d'achat et que ces dispositions pourraient servir à régenter toutes tentatives de la part des défendeurs de minorer les prix les uns à l'égard des autres. Sur cette base, le tribunal est parvenu à la conclusion que les défendeurs seraient davantage en mesure de coordonner leurs prix après la fusion.

Le **Président**, revenant sur la notion de tradition d'ententes, fait observer que l'on pourrait au contraire naïvement penser que lorsqu'une branche d'activité se caractérise depuis longtemps par de multiples ententes, une fusion n'engendrera guère de changements. En revanche, si la concurrence est vive et si tout à coup le marché devient un oligopole fermé dans lequel les pratiques sont coordonnées, alors il semblera utile d'empêcher une fusion parce qu'elle pourra se traduire par des différences importantes dans les niveaux des prix. Il reconnaît toutefois qu'une fusion peut donner un caractère permanent à une situation qui pourrait éventuellement être contestée, en tant qu'entente, en vertu du Sherman Act.

Dans la suite du débat général, un délégué des **États-Unis** admet que lorsqu'une branche d'activité se caractérise par des ententes, il peut effectivement se révéler difficile de déterminer si une fusion se traduira par une réduction sensible de la concurrence (c'est précisément dans ce cas que le critère de position dominante pourra se révéler utile). Il n'est pas pour autant inutile de prendre en compte l'existence d'ententes antérieures comme facteur aggravant. Il est tout à fait justifié de considérer que des entités qui ont été empêchées de constituer des ententes dans le passé pourront recourir à des fusions afin de créer des conditions favorables à des ententes.

Toujours dans le cadre du débat général, un délégué de la **Commission européenne** déclare partager le point de vue des États-Unis en ce qui concerne l'existence d'ententes antérieures dans une branche d'activité donnée et en donne un exemple récent. Dans l'affaire Danish Crown, avant la fusion, quatre sociétés danoises avaient constitué une entente pour leurs achats. L'un des effets de la concentration a été précisément d'internaliser cette entente et de l'étendre au niveau des ventes au détail, ce qui a facilité des comportements parallèles avec le seul autre concurrent au Danemark. Ce n'est pas parce qu'il existe une entente avant la fusion que celle-ci est plus difficile à empêcher pour des raisons de position dominante collective.

Revenant aux communications écrites, le **Président** note que la législation japonaise en matière de fusions s'appuie sur le critère de restriction sensible de la concurrence, et cite à cet égard la phrase suivante : "La probabilité d'effets unilatéraux et d'effets coordonnés est analysée lors de l'examen des projets de concentration". Le Président demande à la délégation japonaise pourquoi si peu de fusions ont été contestées en vertu de cette disposition. Il souhaiterait savoir s'il y a très peu de branches d'activités oligopolistiques au Japon, et donc si les autorités ne craignent guère des effets de coordination, en cas de fusion, ou si cela s'explique par d'autres raisons, telles qu'une lacune éventuelle de la législation ou des difficultés d'ordre pratique dans son application.

Un délégué du **Japon** rappelle tout d'abord que la question de savoir si un projet de fusion risque de restreindre sensiblement la concurrence est un facteur déterminant dans le processus d'examen des fusions par la Commission de la concurrence. Une fusion est interdite lorsqu'il y a une possibilité de "restriction sensible de la concurrence".

Les nouvelles directives de la Commission de la concurrence en matière de fusions, publiées en décembre de l'année précédente, précisent dans quelles conditions un projet de fusion est examiné du point de vue du critère de la restriction sensible de la concurrence. De nombreux facteurs sont pris en compte : nombre de concurrents et niveau de concurrence, obstacles à l'entrée, pression concurrentielle de marchés

voisins, existence de concurrents puissants, etc. Les possibilités d'effets coordonnés sont également mentionnées dans les directives. Par exemple, s'agissant du nombre de concurrents et du degré de concurrence, celles-ci stipulent que si, à la suite d'une fusion ou d'une acquisition, " … le nombre de concurrents diminue et le marché devient oligopolistique (les trois principales entreprises dépassant par exemple 70 pour cent du marché), le risque de comportements commerciaux coordonnées entre lesdites entreprises sera également pris en compte".

Si peu de fusions ont été contestées sur la base du critère des effets coordonnés, il convient de noter que la Commission de la concurrence examine chaque projet de fusion cas par cas et que, si cela est nécessaire, les risques d'effets coordonnés sont analysés dans le cadre du processus d'examen des fusions. Le délégué du Japon évoque l'affaire *Mitsui OSK Lines/Narvix Lines* pour illustrer comment la Commission de la concurrence a pris en compte le risque d'effets coordonnés. Les parties à ce projet de fusion étaient des transporteurs maritimes internationaux qui proposaient de se regrouper pour renforcer leur gestion et accroître leur compétitivité internationale. Les deux compagnies exploitaient des navires qui leur appartenaient ou des navires qu'elles louaient ou affrétaient auprès d'autres armateurs.

La Commission de la concurrence a estimé que la fusion Mitsui/Narvix aurait donné aux deux principales entreprises entre 50 et 70 pour cent des quatre marchés considérés (minerai de fer, copeaux, charbon et pétrole brut transportés par services réguliers). Elle a par conséquent essayé de déterminer si la fusion proposée favoriserait des effets coordonnés. Trois points ont été examinés. Premièrement, des concurrents puissants existaient à la fois au Japon et à l'étranger. Deuxièmement, on ne peut pas dire que les agents de transports maritimes internationaux sont dans une position favorable lors des négociations sur les prix car ceux-ci sont influencés par la situation du marché international. Troisièmement, les propriétaires des marchandises ont des pouvoirs importants. Compte tenu de tous ces facteurs, la Commission a estimé que la fusion proposée n'aurait sans doute pas pour effet de restreindre sensiblement la concurrence par des comportements coopératifs avec les autres concurrents de la nouvelle société.

Le **Président** se penche ensuite sur la communication de la Suisse, en évoquant tout d'abord sa neutralité, puisque ce pays évite d'opérer un choix entre le critère de réduction sensible de la concurrence et celui de la position dominante. Le critère utilisé par la Suisse est celui de la position dominante qualifiée. La première question du Président est de savoir comment la Suisse combine les deux critères. Il note par ailleurs un second aspect intéressant de la communication de la Suisse. Comme celle de la Nouvelle-Zélande, elle souligne les difficultés qu'il y a, dans le cas des oligopoles, à établir une distinction entre les comportements parallèles naturels et les ententes. Comme la communication néo-zélandaise également, elle indique que cette distinction est moins problématique dans le cas du contrôle des fusions que dans celui de l'application d'outils comportementaux. Le Président demande quelques précisions sur ce point.

Le délégué de la **Suisse** explique que la communication écrite est un peu inexacte. Au lieu de dire que la distinction entre entente et simple comportement interdépendant serait plus facile à faire dans le contexte d'une fusion, elle aurait dû dire que cette distinction n'a pas lieu d'être dans le cas du contrôle des fusions. En effet, quel que soit le type de position dominante collective engendrée (ou renforcée) par une fusion, la Commission de la concurrence suisse peut intervenir pour interdire ladite fusion ou la subordonner à certaines conditions.

Quant à la question de savoir ce qu'il faut entendre par position dominante qualifiée, cette expression n'est en fait pas utilisée dans la loi sur les cartels. On la trouve plutôt dans des commentaires écrits par des universitaires sur cette loi. En fait, elle signifie qu'une « position dominante » est insuffisante à elle seule pour motiver une intervention des autorités responsables de la concurrence. Il faut qu'il y ait également élimination de la concurrence effective. La Commission tend à considérer qu'une position dominante conduit automatiquement à l'élimination de toute concurrence effective. On peut toutefois

estimer que pour déterminer si la concurrence effective est éliminée ou ne l'est pas, il faut comparer le pouvoir de marché potentiellement anticoncurrentiel et les gains d'efficience, de manière à estimer l'effet total sur le bien-être. Étant donné que la législation suisse est encore très récente, puisqu'elle ne date que de 1996, les tribunaux n'ont pas encore statué sur ce point.

Le **Président** en vient ensuite à la communication de l'Allemagne et appelle l'attention sur l'examen détaillé des critères structurels utilisés pour évaluer les fusions du point de vue de la création d'une position dominante oligopolistique. Il note que cette communication fournit aussi certains exemples intéressants, notamment celui de l'affaire *Philips/Lindner*. Le Président est particulièrement intéressé par le critère de phase commerciale, auquel un poids plus important est accordé que dans les communications des autres pays. Il est en effet indiqué que « les positions dominantes ont plus de chance d'apparaître dans les phases de maturité et de stagnation d'un marché plutôt que dans les phases d'expérimentation et de croissance ». Si l'on en déduit que les positions dominantes oligopolistiques sont en principe beaucoup plus courantes dans une branche d'activité mature ou en stagnation, cette phrase semble aller directement à l'encontre de ce qui est dit dans la communication finlandaise. Le Président invite la délégation allemande à donner des explications sur l'importance de cette phase.

Un délégué de l'**Allemagne** explique tout d'abord que la communication écrite donne une importance par trop excessive à la phase commerciale dans l'évaluation des fusions en Allemagne. Un sous-titre a malheureusement été omis dans le texte de cette communication. Entre les paragraphes 14 et 15, on aurait dû lire "Evaluation générale". Le paragraphe 15 ne s'applique pas seulement à la « phase commerciale » mais à l'ensemble des facteurs évoqués précédemment. Cela ne signifie pas que la phase commerciale ne joue pas un rôle important dans l'examen des fusions. Les ententes entre concurrents sont généralement favorisées par la perspective de profits à long terme. Ainsi, la probabilité d'une interaction coordonnée dépend de la phase commerciale et du cycle du produit. Dans la phase de maturité et de stagnation, certains facteurs concurrentiels, tels que l'innovation et la différenciation en termes de produits, ont un effet moins modérateur sur les positions dominantes oligopolistiques. En revanche, les conditions de marché qui facilitent les ententes deviennent souvent plus importantes. Par exemple, les surcapacités sont généralement plus courantes durant cette phase, si bien que les francs-tireurs risquent plus d'être sanctionnés. Deuxièmement, la demande stagne ou progresse plus lentement, si bien que les entreprises savent que toute augmentation de leur chiffre d'affaires ne se fera qu'aux dépens des entreprises rivales qui essaieront naturellement de résister à une perte de parts de marché. Il pourra donc en résulter une guerre des prix, dont aucune entreprise ne sortira gagnante. La surcapacité et la stagnation de la demande sont aussi des conditions qui n'attireront vraisemblablement pas de nouveaux venus susceptibles de porter préjudice à l'entente. Plusieurs cas de fusion, en Allemagne, ont confirmé que l'interaction coordonnée est plus probable durant les phases de maturité et de stagnation.

Passant ensuite à l'Union européenne, le **Président** rappelle l'article 2 du règlement européen sur les fusions, qui stipule que "les opérations de concentration qui créent ou renforcent une position dominante ayant comme conséquence qu'une concurrence effective serait entravée de manière significative dans le marché commun ou une partie substantielle de celui-ci doivent être déclarées incompatibles avec le marché commun". La Cour de justice des Communautés européennes, dans l'affaire *Kali et Salz*, a confirmé la prise en compte du critère de position dominante collective dans l'examen des fusions, tout comme la décision rendue par la Commission dans l'affaire *Nestlé/Perrier*. Dans sa communication, l'Union européenne indique que lorsqu'un regroupement risque d'engendrer une position dominante collective, elle examine, entre autres, les relations de concurrence entre les parties à l'oligopole. Le Président souhaiterait avoir davantage d'informations sur les critères utilisés pour effectuer cette évaluation. Il indique qu'en outre, dans l'affaire *Nestlé/Perrier*, la Commission a ordonné le démantèlement de certaines activités afin de créer trois acteurs de taille à peu près identique. Il semblerait que certains autres organismes de concurrence, comme le Bundeskartellamt en Allemagne, estiment qu'une symétrie des surcapacités a tendance à favoriser une coordination oligopolistique. Le Président se

demande pourquoi la Commission a apparemment pensé, dans l'affaire *Nestlé/Perrier*, qu'un "tripole" symétrique était préférable, du point de vue de la concurrence, à un duopole asymétrique. Il souhaiterait également savoir si l'Union européenne tient compte des surcapacités pour évaluer la probabilité d'une coordination oligopolistique.

S'agissant de l'analyse des relations de concurrence entre parties à un oligopole, un délégué de l'**Union européenne** explique qu'elle exige un examen très détaillé du fonctionnement du marché. En particulier, il est nécessaire de comprendre l'interaction concurrentielle entre les parties à l'oligopole et de voir comment la fusion peut modifier ces interactions. Le délégué de l'Union européenne mentionne la récente affaire *Gencor/Lonrho* dans laquelle la Commission, sur la base de documents internes des entreprises concernées, a appris que l'un des objectifs de la fusion était de modifier les relations de concurrence au sein de l'oligopole, de manière à réduire celle-ci. C'est la raison pour laquelle la Commission a décidé de s'opposer à la fusion.

Le délégué de l'Union européenne cite également certains autres critères qui sont normalement examinés : transparence du marché, homogénéité des produits, symétrie des coûts et des parts de marché, rythme de changement technologique et de croissance du marché, etc. La difficulté est de combiner ces différents critères. Aucune formule ne permet de le faire de façon satisfaisante, mais la transparence semble particulièrement nécessaire, et il est peu probable que des problèmes se posent si le changement technologique et la croissance du marché sont suffisamment rapides.

Un autre délégué de l'Union européenne répond à la question posée par le Président au sujet de l'affaire *Nestlé/Perrier*. Il note que la Commission ne pense pas que l'opération, telle qu'elle en a eu connaissance, aurait conduit à un duopole asymétrique, car elle supposait notamment le transfert d'actifs de Nestlé vers BSN. Avec ce transfert, elle se serait probablement soldée par un duopole symétrique. Ainsi, la Commission s'est trouvée confrontée à la possibilité d'un duopole symétrique et, pour autoriser la fusion, elle a accepté la création d'un concurrent viable face à ce duopole. La Commission a dû s'assurer que le nouveau concurrent aurait la masse critique nécessaire pour soutenir la concurrence sur le marché. D'après les données disponibles, cette masse critique nécessitait la combinaison d'actifs au niveau national et au niveau local, d'où la création d'une entreprise ayant un pouvoir de marché substantiel. Cela ne signifie pas que l'option retenue a créé un tripole symétrique. BSN a acquis un volume important d'actifs et, simultanément, Nestlé a perdu un volume important d'actifs en faveur d'un troisième acteur. Il en est résulté un tripole asymétrique, au moins en termes de parts de marché et de capacité.

D'après un rapport récent établi par un organisme indépendant pour le compte de la Commission, l'option décrite ci-dessus s'est révélée efficace. La concurrence dans ce segment du marché de l'eau minérale en France est apparemment satisfaisante.

Le **Président** croit comprendre que l'Union européenne pense aussi que les oligopoles asymétriques sont moins dangereux pour la concurrence que les oligopoles symétriques. Le délégué de l'**Union européenne** le confirme, mais tient à souligner que l'asymétrie ne garantit pas qu'il n'y aura pas de problème de concurrence. Il donne l'exemple récent de l'affaire Danish Crown dans laquelle, pour la première fois, la Commission a déterminé qu'il existait un duopole problématique en dépit de l'asymétrie des parts de marché.

Le **Président** se tourne ensuite vers la délégation du Royaume-Uni et encourage les participants à se procurer une copie du document de séance présentant le rapport de National Economic Research Associates (NERA), établi pour le compte de l'Office of Fair Trading (OFT). NERA a estimé que la théorie de l'oligopole ne permet guère de prévoir comment un marché va se comporter à la suite d'une fusion, comme l'a déjà souligné le délégué australien. Cela tient apparemment aux raisons suivantes : 1) le grand nombre de modèles d'oligopoles et leur sensibilité à de faibles variations des hypothèses en font des outils

très imprévisibles ; 2) la structure des oligopoles, comme d'ailleurs la nature de la concurrence, sont endogènes et évoluent vraisemblablement au fil des ans. Jusqu'à présent, les participants à table ronde admettaient comme hypothèse que le changement structurel provoqué par une fusion entraîne avec une certaine probabilité un changement de comportement qui risque de menacer la concurrence. Maintenant, il est demandé aux délégués de considérer que le comportement peut en soi influer sur la structure oligopolistique d'une branche. Le caractère dynamique du marché doit être pris en compte, comme cela est généralement le cas dans l'analyse des fusions. Un délégué du Danemark a évoqué ce point lors du débat consacré à l'innovation.

L'opinion de NERA selon laquelle la théorie économique n'apporte guère d'élément utile à cet égard semble contredire une phrase figurant dans la communication des États-Unis, où l'on peut lire que le succès de l'analyse des effets coordonnés et de la lutte contre ces effets en cas de fusion dépendra de plus en plus de la capacité à intégrer les données factuelles et la théorie économique. Le Président invite le Royaume-Uni à indiquer dans quelle mesure la théorie économique peut aider les responsables de la concurrence à analyser les situations d'oligopole.

Un délégué du **Royaume-Uni** déclare tout d'abord que le rapport de NERA a été demandé par l'OFT dans le but d'essayer de préciser et peut-être de renforcer l'approche adoptée par l'OFT pour analyser les fusions dans les marchés oligopolistiques. La méthodologie suivie dans le rapport consiste à examiner les ouvrages économiques puis à passer en revue onze cas de fusion pour voir ce qui s'est passé sur le marché à la suite d'une évaluation de l'OFT ou de la Mergers and Monopolies Commission. Globalement, le rapport de NERA, qui présente une très bonne analyse des recherches universitaires dans ce domaine, n'offre aucun remède miracle pour améliorer l'analyse des fusions dans le contexte des oligopoles. La conclusion du rapport confirme l'approche générale adoptée par la plupart des autorités de la concurrence pour examiner les effets unilatéraux et coordonnés des fusions. Des études de cas, qui vont généralement dans le sens des décisions de l'OFT, montrent à l'évidence que les marchés sont dynamiques et qu'il est difficile de prévoir les comportements consécutifs à une fusion. Deux caractéristiques du marché semblent mériter d'être mentionnées. L'une est le rythme du changement technologique. Dans un marché innovant, les possibilités de comportement coordonné sont plus limitées. Deuxièmement, le rôle des acheteurs est important. Des acheteurs puissants peuvent souvent provoquer des changements sur le marché face à une concentration accrue à la suite d'une fusion, et ils peuvent même favoriser l'entrée de nouveaux fournisseurs.

Le rapport de NERA n'a fourni à l'OFT aucune solution universelle pour analyser les fusions impliquant des comportements coordonnés. Le processus d'analyse de ces fusions est relativement complexe et il importe manifestement de les examiner cas par cas, marché par marché.

Le délégué note que les analyses réalisées en application des dispositions complexes touchant les monopoles au Royaume-Uni mettent très souvent en évidence des structures oligopolistiques. Il signale également que le Royaume-Uni a récemment commencé à examiner deux marchés oligopolistiques -- celui de l'automobile et celui des supermarchés. L'une des grandes difficultés est de déterminer quels sont les remèdes adaptés dans ces cas. Il est difficile de demander aux entreprises de se livrer une concurrence plus vigoureuse si elles opèrent dans des structures où les règles du jeu ne sont pas propices à la concurrence. Enfin, le délégué indique que le partage de données d'expérience au niveau international contribue à de meilleures décisions dans les cas d'oligopole.

Le débat général est alors ouvert et les États-Unis et l'Union européenne rappellent les remarques qu'ils ont faites au sujet de l'importance des ententes antérieures en tant qu'indicateur à prendre en compte pour évaluer l'impact probable d'une fusion. Le délégué des **États-Unis** note aussi que des capacités excédentaires peuvent constituer une arme à double tranchant en ce qui concerne la probabilité d'effets coordonnés. La présence de capacités excédentaires permet de sanctionner les francs-tireurs plus

facilement et plus efficacement, et donc de façon plus crédible. Mais elle peut aussi créer de puissantes incitations à agir en franc-tireur, parce que la faiblesse des coûts marginaux rend particulièrement rentable toute vente supplémentaire.

Un délégué de **l'Union européenne** note également qu'à la rubrique des outils comportementaux, la table ronde a examiné essentiellement les articles 85 et 86, ainsi que les dispositions comparables dans les autres pays. Pour ce qui est des outils structurels, les délégués se sont surtout concentrés sur le contrôle des fusions. Il estime que l'Union européenne aurait préféré établir une distinction entre l'analyse préventive et prospective et l'analyse *ex post facto*. En effet, en parlant d'outils structurels et comportementaux, on risque de semer la confusion sur la question de savoir si la Commission pourrait appliquer des outils structurels dans les affaires relevant des articles 85 et 86. Bien que l'article 86 ne soit pas bien adapté à l'utilisation d'outils structurels, la Commission a procédé de cette manière, de temps à autre, dans certaines affaires concernant des positions dominantes individuelles. On peut donc imaginer, eu égard à la décision rendue dans l'affaire *Gencor/Lonrho*, que la Commission envisage la possibilité d'utiliser des outils structurels en vertu de l'article 86 face à des comportements parallèles anticoncurrentiels. Le délégué note toutefois que l'application d'outils structurels peut soulever des difficultés politiques et psychologiques particulières.

Un délégué de l'**Irlande** revient sur les notions de position dominante et de réduction sensible de la concurrence dans le contrôle des fusions. La loi irlandaise sur la concurrence n'utilise pas directement ces critères. Lorsque le ministre saisit l'autorité de la concurrence d'un projet de fusion, l'autorité doit donner son opinion sur les effets concurrentiels de la fusion. La politique en matière de fusion fait actuellement l'objet d'un réexamen en Irlande, et l'autorité a recommandé que le critère de réduction sensible de la concurrence soit retenu. La situation est tellement imprécise actuellement qu'on ne sait trop quelle règle s'applique.

Le délégué de l'Irlande mentionne également une fusion qui a eu lieu quatre ou cinq ans auparavant dans le secteur des carburants. Le nombre de sociétés vendant des carburants devait passer de quatre à cinq, tandis que l'entreprise rachetée avait toujours fait jouer la concurrence sur les prix. Face à cette situation, l'autorité a usé de son influence pour obtenir de l'acquéreur qu'il revende une part importante de l'entreprise qu'il avait rachetée.

Le délégué remarque que si une distinction pouvait être faite entre les oligopoles dommageables et ceux qui ne le sont pas, il n'y aurait plus aucun problème. D'après les débats qui ont eu lieu, il semblerait que diverses règles empiriques puissent être appliquées, mais qu'aucune formule universelle n'existe à cet égard. Le délégué estime qu'il convient de tenir compte des coûts qu'implique une mauvaise décision en matière de fusion, à savoir l'autorisation d'une fusion qui devrait être empêchée ou l'interdiction d'une fusion qui devrait être autorisée. Enfin, paraphrasant un article du Financial Times, il dit que l'évaluation des fusions est une forme de "justice sommaire". Certaines fusions sont autorisées alors qu'elles ne devraient pas l'être, et inversement. Néanmoins, cette justice sommaire est préférable à une absence totale de justice.

3. Résumé du Président

Le Président estime que le débat, intéressant, est difficile à résumer, même si les dernières interventions font un peu le point de la question. A son avis, la science économique n'a qu'un rapport lointain avec les problèmes d'oligopole examinés. L'analyse économique ne semble guère pouvoir améliorer sensiblement la validité des décisions que les autorités de la concurrence doivent prendre. Les questions concernant les oligopoles soulèvent de sérieuses incertitudes et les responsables de la concurrence sont obligés d'appliquer des méthodes très subjectives et probabilistes pour contrôler les

oligopoles, en évaluant la probabilité d'une coordination oligopolistique sur la base de caractéristiques structurelles très générales des branches d'activité considérées. Cependant, le poids relatif à donner à ces divers critères est très difficile à déterminer et les autorités de la concurrence ont en fait une marge de manœuvre très importante dans leurs analyses. Le délégué de l'Irlande a qualifié ce flou de "justice sommaire". Il est difficile de dire si les autorités de la concurrence peuvent obtenir de meilleurs résultats à cet égard. L'un des aspects intéressants du rapport du cabinet britannique NERA est qu'il examine les fusions de façon rétrospective afin de déterminer dans quelle mesure les prévisions des autorités de la concurrence se sont vérifiées. D'autres analyses de ce type pourraient peut-être utilement compléter les travaux réalisés par les autorités de la concurrence.

Le Président note par ailleurs que les autorités de la concurrence semblent elles-mêmes avoir adopté un comportement stratégique face au problème des oligopoles. C’est ainsi que, bien qu’elles aient initialement l’intention d'appliquer des dispositions du même ordre que l'article 85, elles recourent à des dispositions analogues à l'article 86 lorsqu'elles manquent de preuve pour démontrer l'existence d'un accord, et qu'elles complètent simultanément cette action, lorsque cela est possible, par un examen des fusions. Certaines délégations semblent faire allusion à ce type de comportement, qui n’a toutefois pas été véritablement examiné au cours de la table ronde.