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Oligopolistic dominance and the application of article 2(3) the EC Merger Control Regulation

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”Il n’y a pas de théorie de l’oligopole. Il y a des ébauches et des fragments de modèles...Ce que nous appelons théorie se base sur un mélange de bon sens, de raisonnements faux, de quelques observations, d’un grand empirisme et d’un certain recours aux mathématiques et à la logique.”

Shubik

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Summary

The primary aim of the European Union and the integration of states in Europe has from the very beginning been to reduce obstacles to trade and integrate the markets. States in Europe should be able to act in a market without restraints, on an equal basis. Customs and trade barriers have been taken away and a free flow of goods and services is a fact. The gradual development and integration of markets has though not lead to a perfect competitive market, but today we face to a large extent market imperfections. With cross border mergers and acquisitions undertakings are tied together; co-operating to increase their profit. A not new, but to some extent unexamined, problem is the anti-competitive behaviour of members acting on an oligopoly market. When colluding they are able to maximise their joint profit and restrict output, thereby getting an oligopolistic dominant position. The conception of justice is not quite clear. The EC Merger Control Regulation does not literally tend to include this kind of behaviour, but recent case law suggest that this is to be the case.

My aspiration and my primary aim are to make a detailed investigation about the position of oligopolistic dominance under the EC Merger Regulation. The concept of oligopolistic dominance and oligopoly markets will thereby be examined from both a legal and an economic point of view. The underlying theory of the thesis and the hypothesis to be tested is that oligopolistic dominance should be included under article 2(3) the EC Merger Regulation. A recently made judgement from the ECJ make this hypothesis realistic. If the judgement is right or wrong is to be analysed throughout the thesis.

In the thesis oligopoly is used as a market definition, while oligopolistic/collective dominance refers to a market position that might occur on an oligopolistic market.

In economics you can define a market type by its number of producers on the supply side of the market and the number of buyers on the demand side. Oligopoly as a market form have few producers on the supply side and a very large number of buyers on the demand side. Independent oligopolists are not likely to succeed in their effort to maximise profit, since their total incomes are not able to compete with the profit a monopolist would make. From this follows that the oligopolists will strive for collusion and co-ordination to be able to increase their joint profit, thereby acting as if they were a single monopolist. Overt collusion has the disadvantage of being illegal in most countries and therefore tacit agreements are often used, instead of creating a formal cartel. The key problem concerning stability of collusion is the inherent conflict between the collective rationality of a group of suppliers and the individual rationality of each single member producer. Different types of behaviour exist on an oligopolistic market and can be explained using game theory models. The problem is that in an oligopolistic game incentives always exist to cheat. Overall, one of the most important things in an oligopoly game is transparency; the chance for each player to check that the others do not cheat on the agreement.

Considering the legal side of the notion of oligopolies and oligopolistic dominance, the EC Merger Control Regulation developed as a complement to article 85 and article 86 the Treaty of Rome. The Regulation came into effect in September 1990 and has to some extent superseded the effectiveness of article 85 and article 86. It is enough that a dominant position is created for a merger to be prohibited, in contrast to the strengthening of a dominant position that is needed for a merger to be incompatible under article 86. The creation of the dominant position must though significantly impede effective competition.

The market position of the undertakings involved in a transaction that might lead to an

oligopolistic dominant position, is one of the first things to be considered and analysed by the Commission. When measuring concentration the Commission is using the market shares of the undertakings involved. The Commission looks at the combined market share of the leading firms or it calculates the overall market concentration. Strong actual competition is a rather common reason for a concentration with high market shares to although be approved. The Commission is then not satisfied with the market shares as indicators of oligopolistic dominance.

Some other characteristics able to lead to oligopolistic dominance are for example high barriers to entry. The barriers to entry can take several forms, including transport costs, brand awareness and regulatory barriers. Further on, market transparency directly affects the ability of the members of the oligopoly to reach a tacit agreement on profit maximising price and output levels. Thereby it also affects the ability to detect and punish those of the members that are "cheating" on the agreement. Some factors relating to market demand and elasticity of demand increase the likeliness of oligopolistic collusion and oligopolistic dominance. For example, with an inelastic demand in the market the oligopolists will have an incentive to raise the prices collectively and thereby increase the revenue. Oligopolistic dominant behaviour is also more likely to develop in a symmetric market structure than in an asymmetric market structure.

The law of the U.S. has to some extent come further in the case of oligopolistic dominance than the corresponding law of the EU and thereby a comparison is meaningful. The competition authorities in the U.S. focus to a large extent on the preventing of mergers which will permit the exercise of market power where several undertakings act collectively. The goal is to prevent market concentration which might lead to anti-competitive behaviour.

In conclusion, under a literal interpretation oligopolies are not likely to fall under the scope of article 2(3) the EC Merger Control Regulation. Further on, it should not be possible to exclude either forms of dominance, but both sole and joint dominance are possible to be included under the article. The aim and the spirit of the Regulation has to be considered. Oligopolistic dominance should thereby be able to be included under article 2(3) when doing a literal interpretation. This is also the stand that the ECJ has taken recently in the case of Kali+Salz. The case of Kali+Salz both makes it easier to fight oligopolistic dominant positions and anti-competitive behaviour when including the concept of investigation under article 2(3) the EC Merger Control Regulation, but at the same time makes it harder for the Commission to prove the same behaviour. The result, according to my opinion, still being an, to some extent, unclear conception of justice. The burden of proof seems to have become heavier. Several characteristics of an oligopoly market have to be taken under consideration and an economic evaluation carried through, clearly no easy task.

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Patricia Nilsson

List of abbreviation

CMLRev.	Common Market Law Review
CMLR	Common Market Law Reports
EC	European Community
ECJ	European Court of Justice
ECLR	European Competition Law Review
ECR	European Court Reports
ELRev.	European Law Review
EST	Ekonomiska Samfundets Tidsskrift
EU	European Union
Fordham	Fordham Corporate Law Institute
Corp. L. Inst.	
GWB	Gesetz gegen Wettbewerbsbeschränkungen
HHI	Herfindahl-Hirschman Index
LIEI	Legal Issues of European Integration
MC	Marginal cost
MR	Marginal revenue
OJ	Official Journal of the European Communities

1 Introduction

The primary aim of the European Union and the integration of states in Europe has from the very beginning been to reduce obstacles to trade and integrate the markets. States in Europe should be able to act in a market without restraints, on an equal basis. Customs and trade barriers have been taken away and a free flow of goods and services is a fact. The gradual development and integration of markets has though not lead to a perfect competitive market, but today we face to a much larger extent market imperfections. With cross border mergers and acquisitions undertakings are tied together; co-operating to increase their profit. The co-operations are not always perfectly legal - tacit collusion and anti-competitive behaviour are spreading throughout the European Union. A not new, but to some extent unexamined, problem is the anti-competitive behaviour of members acting on an oligopoly market. We mainly find oligopoly markets in the pulp-, chemistry-, construction- and similar industries. When colluding they are able to maximise their joint profit and restrict output, thereby getting an oligopolistic dominant position. The tendency is not these market imperfections increasing, but it is though not possible to say that they are decreasing either, thereby still being an interesting area of study. This kind of market imperfection has to be fought, if wanting to have a common market aiming at achieving the perfectly competitive outcome. Today the conception of justice is not quite clear. The EC Merger Control Regulation does not literally tend to include this kind of behaviour, but recent case law suggest that this is to be the case. Are we able to fight oligopolistic dominance in the European Union today?

1.1 Aim

My aspiration and my primary aim are to make a detailed investigation about the position of oligopolistic dominance under the EC Merger Regulation. The final result will indicate if it is correct to include the concept of oligopolistic dominance under the Merger Regulation or not. Another, underlying, aim is to put focus on an area in EC law which for a long time has been in the background and thereby increase our understanding about the important characteristics which an oligopolistic market has for the internal market of the European Union.

1.2 Questions to be answered

The main questions to be answered are the following:

- What is oligopolies and oligopolistic dominance from a legal and an economic point of view?
- Is there a difference between the concepts of oligopolistic dominance, collective dominance and oligopoly?
- Does the EC Merger Regulation contain any provisions concerning oligopolistic dominance?
- If the EC Merger Regulation does not contain any provisions that explicitly deals with the question of oligopolistic dominance, is it then possible to interpret any of the articles in the Regulation to cover this situation?
- What is the position of the Commission of the European Union and the European Court of Justice?
- Could considerations from the U.S. law of mergers be helpful?
- Do we have a clear conception of justice?

1.3 Method

To be able to do the present research the thesis will be divided into mainly two parts. The *first part* will give some necessary background information and discuss the concept of oligopolistic dominance and oligopoly markets from both a legal and an economic point of view. This part is vital for the analysis and to understand the complexity of the concept. The legal practitioners and their economic counterparts do not always focus on the same aspects. A clarification is also to be given to sort out whether oligopolistic dominance, collective dominance and oligopoly are synonymous concepts. The *second part* will include a more profound analysis of characteristics able to create an oligopolistic dominant position. Using existing case-law, stating whether article 2(3) should be interpreted either one way or the other, an elaborate and thorough analysis of the article will also take place. Comparisons with U.S. merger law is also to be made. Finally a future outline will be given, discussing whether it is possible to say that we have a clear conception of justice in the area of oligopolistic dominance under the EC law today.

Some limitations have had to be made. There is not going to be any discussion about the EC Merger Regulation in general as well as a deeper analysis of article 85 and 86 the Treaty of Rome has been left out, although some comments will be made. The concept of dominance, widely discussed under competition law, is only to be given a short presentation and the same is to be the case concerning the notions of concentration, relevant market and impediment of competition. To make a more thorough examination of these concepts would take the thesis too far and blur the focus of the same. The focus will instead almost entirely be on one article in the EC Merger Regulation, article 2(3), and the discussion take place from the concepts necessary to interpret this article. When discussing article 2(3) an analysis of single firm dominance has been left out, since it is rather clear that this concept is included under the article - the controversial issue is whether a group of colluding firms are to be included. The analysis does not intend to include detailed information about the competition law of any individual country. The only single country, which will have a more prominent place in the thesis is the U.S., coming from its, to some extent, more profound experiences in the field.

Questions and problems relating to the method are almost impossible to avoid. Has the right limitations been made or has something been left out that should be included? Is it necessary to include economic background information? Those and related questions always arise. The aim of the thesis vindicates the choice of method. Article 2(3) the EC Merger Regulation is the article most likely to deal with oligopolistic dominance under the Regulation and thereby a natural point of focus. The economic and legal background are necessary to make an understandable and interesting thesis.

1.4 Theory

The underlying theory of the thesis and the hypothesis to be tested is that oligopolistic dominance should be included under article 2(3) the EC Merger Regulation. A recently made judgement from the ECJ make this hypothesis realistic. An existing oligopoly should thereby be able to influence the lawfulness of a merger. Worth mentioning is that it is not the oligopoly as such that is fought, but only its position on the market when reducing competition. An oligopoly not having a dominant position is not likely to fall under article 2(3) the EC Merger Control Regulation. If the judgement is right or wrong is to be analysed

throughout the thesis. A summary of the most important findings in the decisions of *Kali+Salz/MdK/Treuhand* and *Kali+Salz* is to be given below¹.

A decision from the Commission was given in *Kali+Salz/MdK/Treuhand* already in 1993. The case concerned a joint venture, combining the potash and rock-salt activities of Kali+Salz (K+S) and MdK. Treuhand being an institution incorporated under German Democratic Republic (GDR) public law, in order to privatise the former state-owned undertakings of the GDR and as such the sole shareholder of MdK. The joint venture would be jointly controlled by K+S and the Treuhand. K+S were going to acquire 51% of the voting rights, but still they needed the approval of Treuhand in a number of market related strategic decisions. The rights of the minority shareholder (right of assent) far exceeded the normal protection of the rights of minorities. The joint venture was considered to be a concentration in the form of a concentrative joint venture under article 3 the Regulation. The concentration was also regarded having a Community dimension according to article 1(2) the Regulation.

The more important analysis is given in the discussion about the applicability of article 2(3) the Regulation. With the relevant product market being potash-salt-based products for agricultural use and the geographical markets the German market and the Community market apart from Germany, the Commission made its decision. In conclusion the Commission finds that after the proposed merger a dominant position will be strengthened on the German market for agricultural potash; entry barriers being the main factor of explanation. But the dominant position of K+S would still be a fact even without the merger, since MdK is likely to withdraw from the market if not acquired by another undertaking and thereby K+S would get their market shares. Therefore the merger could not be considered to reinforce the dominant position on the German market. Regarding the commercial links (co-operation in an export cartel and in a joint venture) existing between K+S and EMC/SCPA², the Commission states that these links could create a joint dominant position on the Community market outside Germany. Since the parties agreed to certain commitments³ reducing the likeliness of oligopolistic dominance, the merger could although be declared compatible with the Common market if they complied to these commitments. The joint venture is thereby approved and declared to be compatible with the common market.

The ECJ took its stand on the case the 31 of March 1998, after having opened procedures due to the criticism following the decision of the Commission, especially from the French Republic. Regarding the question of oligopolistic dominance the French Government and the applicant companies (SCPA and EMC) do not think that the Commission has the authority under the Regulation to apply the Regulation in cases where there is an oligopolistic dominant position. They do not consider the Regulation, especially article 2, to cover such a situation. Further on, the legal base of the Regulation does not justify the interpretation made by the Commission, according to the applicants and there is also nothing in the legislative history of the Regulation supporting the view that the legislature intended to cover oligopolistic dominant positions. If the legislature would have wished to introduce such a rule prohibiting oligopolistic dominance they would have done so expressly. EMC and SCPA also suggest that the interpretation of the Commission has the effect the Regulation being applied even where

¹ Case *Kali+Salz/MdK/Treuhand*, No. IV/M.308 (Dec. 14, 1993), OJ L 186/38 (July 21, 1994) and Case C-68/94 & C-30/95 *Kali+Salz* (March 31, 1998).

² EMC is a production group owning all shares in SCPA. SCPA thereby being a part of this group and also middleman for the import of potash into the French market (almost having a monopoly considering this activity). Strong commercial links with K+S exists.

³ K+S is to leave the export cartel and reorganising their distribution in the French market.

the market share of the undertakings concerned does not exceed 25%⁴. Finally the applicants argue that the lack of adequate procedural safeguards for third parties confirms that the Regulation is not designed to be used as a framework for the application of the concept of an oligopolistic dominant position.

The Commission counters that the wording of the Regulation does not exclude its being used also to prevent the creation or strengthening of oligopolistic dominant positions. Article 2(3) of the Regulation links the dominant position to the concentration and not to the undertakings concerned. Further on, the use of the article in conjunction with article 87 and 235 the Treaty of Rome shows that its objective is to fill the gap left by article 85 and 86 the Treaty of Rome. The neutral formulation of article 2(3) was intentional, since the member states could not agree upon the question of oligopolistic dominance and thereby it was left open in the article. The Council has thereby not excluded the use of the Regulation to prevent oligopolistic dominant positions on the market explicitly. The Commission states that the procedural rules for applying the Regulation give enough protection to the interest of third parties. Finally, the Commission points out that the possibility of prohibiting a concentration which strengthens the oligopolistic nature of the market derives, first, from the economic theory that competition does not function properly in an oligopolistic market and, second, from the need to maintain and develop effective competition in the common market, in accordance with article 2(1)(a) the Regulation.

The ECJ finds that an oligopolistic dominant position falls under the scope of the Regulation, but the decision of the Commission is still to be annulled in its entirety since the concentration was not considered to create an oligopolistic dominant position.

1.5 Material

The thesis is based upon various kinds of legal and economic literature, as well as legal and economic articles discussing the subject. The material shows a rather broad scale including both practitioners in competition law and economics, thereby discussing oligopolistic dominance from different point of views. Case law is a vital part of the material used, reflecting both cases from the European Court of Justice (referred to as ECJ) and the U.S. Supreme Court. A limited amount of electronic resources have been helpful.

The legal writers show to some extent different views on the subject, not agreeing on the main question for the thesis, i.e. whether it is possible to include oligopolistic dominance under article 2(3) the EC Merger Regulation at all. This makes the discussion more interesting and my standpoint will thereby be put in this context. The economic literature is mainly used for background information and is not expected to give an answer to the main question and is not able to do so either. The economic literature is merely going to give us a useful and interesting side of the problem of oligopolistic markets, not able to be given by the legal literature.

2 Oligopolistic/collective dominance and

⁴ This being contrary to the 15th recital in the preamble of the Regulation. According to the recital, impediment of effective competition is not likely when the market share of the undertaking concerned does not exceed 25% either in the common market or in a substantial part of it. The concentration could thereby also be presumed to be compatible with the common market.

oligopoly

Is it correct to use the concept of oligopolistic/collective dominance and the concept of oligopoly synonymously or are they three different concepts that have to be separated? This is important for the further discussion since there appears to be different favour of the concepts in the legal and in the economic literature.

2.1 The concept of oligopoly

In economics you define oligopoly as a market structure in which a small number of producers compete with each other⁵. In competition law, when judging a market with many producers, the main question is whether there exists a small group of producers with a high market share, which is capable of collectively impeding competition. If a small number of competing producers supply a particular market this is often referred to as an oligopoly and the impediment of competition as collective or oligopolistic dominance.⁶ Flint defines oligopoly as a given market where no single undertaking possesses enough market power to be considered as a monopoly⁷, but where the behaviour and economic performance of several undertakings taken together is close to that of a single undertaking monopolist. Thereby the oligopolistic industry will consist of rather few undertakings (about ten to twelve according to Flint). Through colluding several undertakings can achieve together what they would not be able to do alone. The price and output decisions of each oligopolist will not only have effect on the market in question, but also on his rivals. Each undertaking has to be aware of its impact on other undertakings in the industry^{8,9}. One form of oligopoly is duopoly where only two undertakings are involved, this form is to be referred to when considered simplifying the discussion.¹⁰ Not to forget, is that the mere existence of an oligopoly in a market, does not necessarily mean that effective competition can not take place. It is thereby not correct to presume dominance in oligopolistic markets.¹¹

There are problems surrounding the definition of oligopoly, since it is not possible to make a precise description as in the case of monopoly and perfect competition¹². Oligopolistic markets vary a great deal from one another and to decide precisely what constitutes an

⁵ Parkin, Michael et al., (1997). *Economics*. p. G-10

⁶ European Commission, (1995). *New Industrial Economics and Experiences from European Merger Control - New Lessons about Collective Dominance?* p. 8

⁷ Monopoly being a market form where only one supplier exists, protected from competition by a barrier preventing the entry of new undertakings. The industry produces a good or service for which no close substitute exists. See Parkin, Michael et al., (1997). p. G-9.

⁸ "...he will realize 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 entirely independent, the result is the same as though there were a monopolistic agreement between them." See Scherer, F.M. & Ross David, (1990). *Industrial Market Structure and Economic Performance*, 3rd ed., p. 205. A monopolistic market is a market where a large number of undertakings compete with each other by making similar but slightly different products. See Parkin, Michael et al., (1997). p. G-9.

⁹ Flint, David, (1979). "Abuse of a Collective Dominant Position", *LIEI* 1978/ 2, p.49

¹⁰ Gundersen, Frank Fritjof, (1972). *Kontrollen med karteller og storbedrifter*. p. 19.

¹¹ Lowe, P., (1994). "Recent Developments In EC Merger Control", *Fordham Corp. L. Inst.*, p. 149.

¹² Perfect competition is a market structure consisting of many undertakings, each undertaking selling an identical product (homogenous product). There are also many buyers, no barriers to entry into the industry, undertakings

oligopoly is thereby rendered difficult. How many undertakings constitute an oligopoly? How few is few? At which point is it possible to say that market dominance take over in the oligopoly market, thereby threatening competition? Those and related questions can partly be answered using different instruments like concentrations ratios, product characterisations etc., but they do not, unfortunately, give the whole picture.

2.2 The concept of oligopolistic/collective dominance

As is to be noticed, there is no coherent use of the two notions that here are going to be discussed. Some authors prefer to use the concept of oligopolistic dominance, while others tend to use collective dominance in their writing, examples are to be given below. Which is the right definition? Are there a right definition at all or is it possible to use the concepts correspondingly? Why are different concepts used?

Hawk and Huser are using oligopolistic dominance and collective dominance correspondingly, but they seem to prefer the former notion¹³. Neven et al. are also using the two concepts synonymously, without putting emphasis on either of the two concepts¹⁴. Another approach is given by Craig and de Búrca, who start out from an economic definition of an oligopolistic market, thereby using the term oligopolistic when discussing the matter¹⁵. The Commission of the European Union, however, has in most of its decisions used the later notion, i.e. collective dominance. Though, the Commission did use both the concepts in the recent ruling of *Price Waterhouse/Coopers & Lybrand*¹⁶, when discussing the possible abuse of oligopolistic dominance. Oligopolistic dominance here being the main concept under which collective dominance is included - collective dominance being a part of oligopolistic dominance, evaluating the different characteristics likely to indicate an oligopolistic dominant position. It is the notion of oligopolistic dominance that is reviewed and taken under consideration. A possible change in the use of concepts.¹⁷ Kantzenbach et al. give us a link between the market definition and the competition position, stating that collective market dominance can only be achieved if no competition exists between the members of an oligopoly (no internal competition) and the oligopoly as such holds a dominant market position¹⁸. As Kantzenbach et al., also Flint is using the concept of collective dominance when clarifying that collective dominance is the "abusive exploitation of the position of power which an enterprise possesses in an oligopolistic industry". According to him it is irrelevant whether there exists any competition between the undertakings in the industry. It is the overall effect towards third parties which is important to consider.¹⁹ By using the definition given by Flint, Shaw is stating that collective dominance is "a means whereby oligopolistic markets can be controlled through the existing competition rules"²⁰.

A possible explanation of the different use of the two concepts is the time factor. In recent

in the industry have no advantage over potential new entrants and undertakings and buyers are completely informed about the price of each undertaking's product. See Parkin, Michael et al., (1997). p. G-11.

¹³ Hawk, Barry E. and Huser, Henry L., (1996). *European Community Merger Control: A Practitioners Guide*. p. 215

¹⁴ Neven, Damien et al., (1993). *Merger in Daylight*. pp. 106-107

¹⁵ Craig, Paul and de Búrca, Gráinne, (1997). *EC law*. pp. 892, 995.

¹⁶ Case *Price Waterhouse/Coopers & Lybrand* IV/M.1016 (May 20, 1988), OJ L 50/27 (Feb. 26, 1999).

¹⁷ See para 95-119.

¹⁸ European Commission, (1995). p. 9

¹⁹ Flint, David, (1979). p.63

²⁰ Shaw, Josephine, (1989). "Collective Dominance or Concerted Practices?", *14 E.L. Rev.*, p. 99

years the concept of oligopolistic dominance appears to be the notion mostly used, but some literature still refer to the older concept of collective dominance.

The thesis does not intend to make a thorough analyse of the concept and the conclusions to be drawn is that the concept of oligopoly is used to define a certain kind of market. When discussing the kind of dominance that occur on an oligopolistic market it is possible to use either the concept of oligopolistic dominance or the concept of collective dominance. Oligopoly is thereby a market definition, while oligopolistic/collective dominance refers to a market position that might occur on an oligopolistic market. When discussing the economic side of the notion I intend to use the concept of oligopoly as defined above and this is also to be the case when discussing the legal side, but here adding the concept of oligopolistic dominance describing the possible abuse of a dominant position.

3 Economic theory

To be able to understand the complexity of oligopolistic dominance it is necessary to consider the economic side of the notion. The concept of oligopoly has undergone deep examination in economics and thereby we might learn something from its reasoning. Leaving this discussion behind would prevent a deeper knowledge of oligopolistic dominance. This part is not going to deal with economic model building or formulas - since this would take the thesis to far.

3.1 Oligopoly as a market definition

3.1.1 Characteristics of an oligopoly market

According to economic theory it is possible to define a market type by its number of producers on the supply side of the market and the number of buyers on the demand side. Oligopoly as a market form has few producers on the supply side and a very large number of buyers on the demand side.²¹ The quantity sold by a producer depends on that producer's price and the prices and quantities sold by the other producers. It is important for the producer to take into account the effects of its own actions on the actions of other producers, especially if the market will continue to operate for a long time.²² The producers best choice simply depends upon the choices its rivals make.

The most characteristic feature of oligopoly, from an economic point of view, is that oligopolists are strategically linked to each. This feature distinguish the oligopolistic market from markets with perfect competition or monopoly.²³ The market of oligopoly is also dependent on factors like the nature of the competition²⁴, the order of decisions, available information and barriers to entry on the market.²⁵ Features like the level of absolute numbers of sellers, concentration on the buying side of the market, homogeneity of the product, the history of

²¹ Friedman, James, (1983). *Oligopoly theory*. p. 1

²² Parkin, Michael et al., (1997). p. 319

²³ *ibid* p. 229

²⁴ What the undertakings are taking under consideration when making decisions.

²⁵ Stenbacka, Rune, (1991). "Modern oligopolteori och konkurrenspolitik", *EST*, no. 4, ser. 3, p. 229.

collusion, economies of scale and shifts in rank among the leading firms²⁶ are also factors indicating if a market is oligopolistic or not. A more thorough analysis of the factors is not to be given here²⁷.

3.1.2 Concentration measures

In economics the number of producers that make a market oligopolistic is measured by, for instance, the five-firm concentration ratio. This ratio shows the percentage of the industry's output accounted for by the five producers having the largest output in the industry. Volume or the value of the sales is the usual criterion to measure the output. The ratio range from almost zero to 100. When using the ratio it is possible to get information about the degree of competitiveness of the market. A high degree of competition is reached when the concentration ratio is low and thereby a low degree of competition shows a high concentration ratio. The five-firm concentration ratio can also be used as an indicator of collusion among producers in an oligopolistic market. If the ratio exceeds 60 percent, conclusions to be drawn include the likeliness of an industry having a high degree of market power. It is possible for the producers in this market to collude and behave as a monopolist. A ratio under 40 percent indicates that the market is more likely to compete effectively. Between 40 and 60 percent the industry can have an oligopolistic market structure.²⁸

In the U.S. another measurement is also widely used, since the concentration ratio only contain information about the shares of the largest firms in an industry. A complete picture of the industry is therefore hard to get²⁹. The alternative measure of concentration is the Herfindahl-Hirschman Index (HHI). The index combines information about the market shares of all producers in the industry. It is not necessary to use the market shares of all the undertakings in the market when measuring the HHI, a good indication of sales concentration is possible to get anyway. It is though necessary to measure the market shares of the larger undertakings³⁰. The HHI is also used for policy considerations^{31, 32}.

²⁶ Winkler, Antoine & Hansen, Mark, (1993). "Collective Dominance under the EC Merger Control Regulation", *CMLRev.* 30, p. 790

²⁷ For a more detailed examination see p. 34, although from a legal point of view applicable also here.

²⁸ Parkin, Michael et al., (1997). pp. 312-313

²⁹ For example a five-firm concentration ratio of 60 percent could mean that a single undertaking is holding 54 percent of the market together with 23 other undertakings each holding only 2 percent of the market. It could also mean that the five largest undertakings are holding 15 percent each and three smaller undertakings share the rest of the market. The first case would here be a market of monopoly, or a dominant-undertaking market and the second an oligopoly market - few undertakings that together share the market.

³⁰ The index is calculated by squaring and adding the market shares of individual undertakings. If an industry is supplied by only one undertaking, a monopolist, the market share of that supplier will be 1 and the HHI 1. If there are two undertakings holding half of the market, the value of the index will be $\frac{1}{2}$. With four undertakings, each with one fourth of the market, the index will be $\frac{1}{4}$. If we have equal sized undertakings the value of the HHI will go from 1 to 0. Thereby it is an useful indicator of fewness - the larger the index the fewer are the number of undertakings supplying the industry. If the market does not consists of equal sized undertakings we have to compare the index of the undertakings in this market, with the index in a market where the undertakings would face undertakings having the same market share. If, for example, we have an industry with three undertakings - one holding half the market and the other two holding one quarter each, the index would be $\frac{3}{8}$ (the market shares first squared and then added). This index is less than the HHI in a market with two equal sized undertakings ($\frac{1}{2}$), but more than the HHI in a market with three equal sized undertakings ($\frac{1}{3}$). Three undertakings, one firm larger than the other two, will here achieve a greater concentration of sales than three equal sized undertakings, but a smaller concentration of sales than two equal sized undertakings. The HHI is thereby able to show a more realistic version of the concentration in the market. In the 1992 Merger Guidelines of the U.S. the same mathematical operation is used, but here using the percentage instead. An index under 1000 is the same as an unconcentrated market. Between 1000 and 1800 the market is moderately concentrated and

3.2 Collusion

Independent oligopolists are not likely to succeed in their effort to maximise profit, since their total incomes are not able to compete with the profit a monopolist would make. From this follows that the oligopolists will strive for collusion and co-ordination to be able to increase their joint profit, thereby acting as if they were a single monopolist.³³

3.2.1 Price collusion

The oligopolists must reach an agreement on the best strategy to maximise profit. This is not an easy task, since the members of an oligopoly often serve different geographic and product markets and use different production and distribution techniques. They will have to compromise to find a common ground. If the product is differentiated it will be more difficult to secure the agreement owing to the need to determine relative prices³⁴. The oligopolists must fix a whole schedule of relative prices and not just a single price. If there exist changes in demand over time for different varieties of the product the problem is even greater - this changes profit maximising prices. A new bargain process has to start every time the relative prices have to be adjusted.³⁵ Kantzenbach refers to this kind of collusion as price-collusion and summarises it as a collusion where the suppliers act jointly to raise price above their marginal costs³⁶. Raising the price results in a reduction in the quantity demanded in the marketplace and the quantity sold by each supplier. Because the market price has been collectively raised, the supplying undertakings earn higher profits overall.³⁷

A problem is cost differences. Joint profit maximisation requires that output is distributed among the producers in a way that makes marginal cost the same for them all. If marginal cost is not the same, the oligopoly increases its joint profit by shifting output away from higher marginal cost producers towards lower marginal cost producers. High-cost producers might leave the oligopoly, when unwilling to accept a lower market share.³⁸

3.2.2 Capacity collusion

A second type of collusion, mentioned by Kantzenbach, is capacity collusion. This kind of collusion refers to producers' choice of their scale or productive capacity. A collective limitation exists which states the level of production in a particular market. With reduced output, price is increasing and profits maximised. Individual producers are more likely to

warrants further investigation, especially if the market concentration is increasing with more than 100 units. An HHI higher than 1800 is a concentrated market and an increase in concentration is serious already at 50 units increase.

³¹ The Department of Justice's Merger Guidelines in the U.S. uses HHI for policy purposes to explain to businessmen which mergers the government will consider challenging.

³² Martin, Stephen, (1988). *Industrial economics*. pp. 100-104

³³ *ibid.* p. 133

³⁴ A relative price is the ratio of the price of one good or service to the price of another good or service. It is also an opportunity cost. See Parkin, Michael et al., (1997). p. G-12.

³⁵ Martin, Stephen, (1988). pp. 133-135

³⁶ The marginal cost is the change in total cost resulting from an unit increase in output. It is calculated as the increase in total cost divided by the increase in output. See Parkin, Michael et al., (1997). p. G-8. For figure see page 20 the thesis.

³⁷ European Commission, (1995). p. 12

³⁸ Martin, Stephen, (1988). pp. 136-137

adhere to the agreement since they have decreased their own capacity to produce. The producers involved will all strive for full capacity and this leads to little or no incentive for individual producers to use pricing measures to change its own level of output. Thereby capacity collusion is not threatened by short-term cheating, but instead has to cope with threats to the stability of the restriction made, since the producers might want to establish more capacity. The question is if increasing output to gain more profit is able to compensate the loss in profit deriving from decrease in market price. Capacity collusion is a long-term process where the overall market demand plays an important roll^{39,40}.

3.2.3 Market-area collusion

The third type of collusion that Kantzenbach refers to is market-area collusion. This form of collusion consists of agreements and tacit understandings which divide markets either by product type or by region. The collusion refers to the choices of each producer to specialise in certain market segments and the recognition of the specialisations chosen by the other producers. The competition in the market is harmed. The barriers to mobility between the market segments decide whether there exists a collusion of this kind or not. There is a low substitution effect⁴¹ between comparable products under this collusion.⁴²

3.2.4 Overt and tacit collusion

Oligopolists may collude overtly or tacitly in order to maximise their profit. Overt collusion has the disadvantage of being illegal (just as tacit collusion) in most countries and thereby tacit agreements are often used to cope with this problem, instead of creating a formal cartel. Signalling is important to be able to co-ordinate prices without meeting. Price changes have to be announced in some way and can be done in advance. If one producer is recognised as the price leader in the industry, the others will follow the price he decides. The problem with agreement is thereby solved. If there is some generally accepted rule that determines prices no need for an overtly agreement exists. Everyone only has to follow the rule.⁴³

3.2.5 Adherence to the agreement

After the agreement is reached, oligopolists face problems concerning adherence to the agreement. If the cartel is successful other producers would like to enter the oligopoly market and incentives also exist for individual members to cheat and produce more than the agreement says, to increase their own profit. If all producers cheat the cartel will come to an

³⁹ The overall market demand (or total demand) is important, because the more price sensitively the overall market responds to an increase in output, the smaller the incentive will be to expand capacity and the lesser will the threat to the stability of the restrictive practices be. With a price sensitive market the oligopolists will not risk that an increase in output requires a lower price from the consumers.

⁴⁰ European Commission, (1995). pp. 13-14

⁴¹ Substitution effect is the effect of a change in price of one good or service, relating to another good or service when the consumer is indifferent between the original and the new product. If the price of the original good or service increases, the consumer will start demanding and buying the other good or service instead. See Parkin, Michael et al., (1997). p. G-13.

⁴² European Commission, (1995). p. 14

⁴³ Martin, Stephen, (1988). pp. 139-141

end and lose control of the market.⁴⁴ The key problem concerning stability of collusion thereby is the inherent conflict between the collective rationality of a group of suppliers and the individual rationality of each single member producer⁴⁵. The static model of cartel behaviour says that all members will have incentives to cheat on the agreement. The dynamic model goes further and states that a producer will have more incentives to cheat the greater its rate of time preferences and the smaller its market share⁴⁶. Hence, a cartel is more likely to survive if it consists of few producers, with large market shares and that take a long view. Collusion is also more likely to succeed if customers do not change suppliers very often. The fewer the suppliers are, the less often will one producer lose customers to other producers and the product homogeneity is also relatively great as well as the substitution elasticities between different products. Frequent small sales instead of infrequent and large sales is another factor, which makes it easier to maintain a collusive agreement.⁴⁷

3.3 Oligopoly game

Different types of behaviour exist on an oligopolistic market and can be explained using game theory models. When discussing oligopoly games it is preferable to use the example of duopoly - two producers of a good or service competing with each other.

3.3.1 Possible actions of the game

If two producers enter into a collusive agreement⁴⁸ there will be two strategies to use - complying or cheating. A producer is complying when following the agreement and is cheating when breaking the agreement in order to make a higher profit for himself. The two strategies imply four possible combinations of actions for the two producers, either both producers comply, both producers cheat, producer A cheat while producer B comply or producer A comply while producer B cheat. These combinations of actions could be visualised in a payoff matrix^{49,50}.

⁴⁴ *ibid.* p. 134

⁴⁵ European Commission, (1995). pp. 12-13

⁴⁶ If an undertaking is cheating he only profits as long as the cheating is not detected. At the moment he is discovered the cartel breaks down, since the other producers in the industry will not limit their production and keep the price at a high level anymore. Hence, whether cheating is profitable or not depends on the time rate from the starting point of the cheating and to detection. If rate of time preferences is low the undertaking will almost put as much weight on profits lost after detection as he puts on the short-term increase in profit he gains before detection. If rate of time preferences is low enough an undertaking is not interested in cheating.

⁴⁷ Martin, Stephen, (1988). pp. 144-151 and European Commission, (1995). p. 12

⁴⁸ An agreement between two (or more) producers to restrict output in order to raise prices and profits. This kind of agreement is usually illegal. If a group of producers enter into a collusive agreement to restrict output and raise prices and profits they make a cartel. See Parkin, Michael et al., (1997). p. 324

⁴⁹ The payoff matrix is a table that shows the payoffs for every possible action by each player for every possible action by each other player. See *ibid.* p. 322

⁵⁰ *ibid.* p. 324

Figure 1; Payoff matrix

Payoff matrix

	cheat	comply
cheat	0	-
comply	++	+

If the two producers decide to collude and thereby comply to the agreement one possible outcome of the duopoly game is that they produce the monopoly profit, maximising output and then divide the output equally between themselves. The problem is that in an oligopolistic game incentives always exist to cheat. Under a collusive agreement the price for the quantity sold is set higher than the marginal cost. If a producer cheats on the agreement and raises his output, even though the price will fall below the agreed price, more will be added to his revenue than to his costs leading to an increase in his profit. As shown in the payoff matrix there are two possible outcomes if one or both of the colluding producers cheat. If only one producer cheats he will be better off in the short run⁵¹, getting an economic profit⁵² at the same time as the other producer faces an economic loss. If both producers cheat each producer will make zero economic profit and they will thereby both achieve the perfectly competitive outcome. The collusive agreement will break down totally.⁵³

3.3.2 Equilibrium choices of the game

The Nash equilibrium⁵⁴ of an oligopoly game is a dominant strategy equilibrium and occurs when there is a dominant strategy⁵⁵ for each player. If the game is played only once the equilibrium is that both producers cheat, as can be seen in the payoff matrix shown by the figure zero (0). Neither of the two producers can be sure that the other producer will comply with the agreement if he himself complies, leaving them both with a profit. Therefore the best alternative is to cheat because then he will not face a loss but only zero economic profit. If instead the game is played repeatedly there will be opportunities for each player to punish the other player if he is not following the agreement⁵⁶. The duopolists learn how to co-operate more effectively. There could be more than one equilibrium if the game is played more than once - one is the Nash equilibrium but another outcome called co-operative equilibrium is also possible, where the equilibrium results from each player responding rationally to the threat of

⁵¹ He will only be better off in the short run, since if the game is repeated the other player will also choose to cheat next time. This player will not take the risk of the other player cheating again.

⁵² Economic profit is a producer's total revenue minus its opportunity cost (the best forgone alternative of the action). See Parkin, Michael et al., (1997). pp. G-4, G-10

⁵³ *ibid.* pp. 326-328

⁵⁴ Nash equilibrium occurs when player A takes the best possible action given the action of player B, and player B takes the best possible action given the action of player A. See *ibid.* p. 323.

⁵⁵ This is a strategy that is the same regardless of the action taken by the other player. See *ibid.* p. 323

⁵⁶ There are mainly two forms of punishment. The smallest penalty is called "*tit-for-tat strategy*", where player A co-operates in this period if player B co-operated in the previous period, but player A will cheat if player B cheated in the previous period. A harder penalty is the "*trigger strategy*", where player A co-operates if player B co-operates, but plays the Nash equilibrium strategy (i.e. he cheats) forever thereafter if player B cheats.

the other player to punish if the agreement is broken⁵⁷. The more players in a game, the more opportunities exist to cheat and that is one of the reasons why a cartel often faces the problem of breaking down.⁵⁸ If the number of players change this increases uncertainty and make it more difficult to co-operate. Stability is reached when the game is played by a fixed number of players that are familiar to each other⁵⁹.

Overall, one of the most important things in an oligopoly game is transparency; the chance for each player to check that the others do not cheat on the agreement. The more complicated the game is, the more detailed must the rules that regulate adherence to the game be.⁶⁰

3.4 Economic efficiency

With a view to explain concentrations, two contrasting approaches are often used. Increased efficiency linked to economics of scale⁶¹ is the first one. It could be a matter of pure technological economics of scale or it could be related to the fields of research, marketing, financing or management. The second approach contains a wish to attain monopoly power, by reducing the number of independent producers and encourage their collusion⁶². The second approach is highly connected with the case of oligopoly.

Economic efficiency is a situation that occurs when the cost of producing a given output is as low as possible. Competitive markets have been proven to be economically efficient and the rule that states efficiency, i.e. that the price of each good should be equal to its marginal cost of production, is thereby applicable. An undertaking will choose to exercise less market power at the moment it achieves higher efficiency. This is so since if able to lower unit costs by increasing output, it will take a lower price to make it possible to sell more and benefit of lower costs per unit.⁶³ In oligopoly and monopoly markets the marginal cost pricing rule is not valid, since price and marginal revenue⁶⁴ in these markets deviate. The result is an economy not being Pareto efficient⁶⁵. Oligopoly, as monopoly, could thereby be characterised as a form of market failure, on grounds of its lesser efficiency. Market failure prevents some of the gains from trade to be achieved, creating a deadweight⁶⁶ loss. Friedman thinks that the oligopolistic market will come closer to the marginal cost pricing norm as the number of producers in the market are increasing. It should then be possible for an oligopolistic market to be almost

⁵⁷ With a co-operative equilibrium each player must be aware of that it is in the interest of the other player to respond with a tit-for-tat strategy. The threat of cheating in the next period is credible and thereby support a monopoly equilibrium outcome.

⁵⁸ *ibid.* pp. 329-330, 337

⁵⁹ Ridyard, Derek, (1994). "Economic Analysis of Single Firm and Oligopolistic Dominance under the European Merger Regulation", *ECLR*, no.5, p. 255.

⁶⁰ Parkin, Michael et al., (1997). pp. 259-260

⁶¹ Technological conditions under which long-run average cost decreases as output increases. See *ibid.* p. G-4

⁶² Jacquemin, Alexis, (1982). "Concentration and Mergers in the E.E.C.: Towards a system of Control". In: Hopt, Klaus J., (ed.) *European Merger Control*. p. 158

⁶³ Martin, Stephen, (1988). pp. 180-181

⁶⁴ The marginal revenue is the extra total revenue that a producer receives from selling one additional unit of the good or service. It is calculated as the change in total revenue divided by the change in quantity sold. See Parkin, Michael et al., (1997). p. G-9

⁶⁵ A market is Pareto efficient when it can not reallocate resources through trade, production or consumption to make at least one person better off without making anybody else worse off. *ibid.* p. G-10

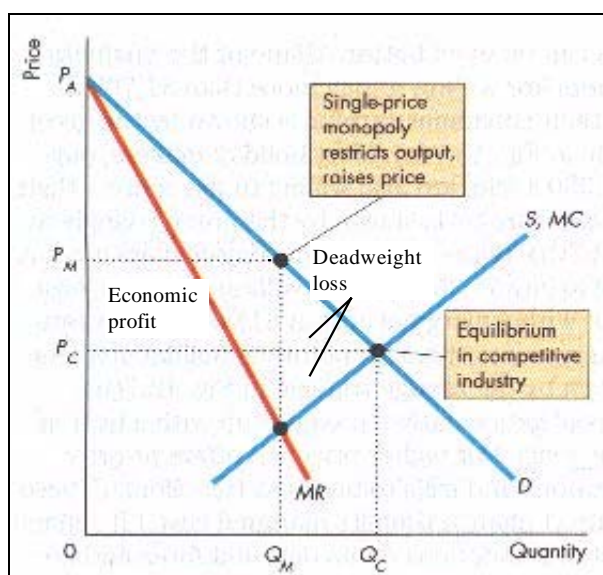
⁶⁶ Deadweight loss (DWL) is the loss of allocative efficiency as a result of the reduction of consumer and producer surplus due to output being reduced below its efficient level. DWL measures the degree of market failure or allocative inefficiency created by a monopoly or oligopoly. Hence, DWL is the sum of consumer and producer surplus lost. See figure page 22 the thesis.

efficient if the number of producers is large.⁶⁷ It is though arguable if the market is oligopolistic at all at that point.

3.5 Profit maximisation

Strategic interaction is important in oligopolistic markets. Producers acting on a competitive market lack strategic interaction, since the choices made by a single producer does not affect the market price of the homogenous good the industry produce. Strategic interaction is also excluded for the monopolist, since he is not affected by policies of any large producer and must be sensitive to market conditions. Both the competitor and the monopolist face maximisation problems when trying to maximise profit, in contrast to the oligopolist whose profit maximisation problem is interconnected with the problems of several rivals.⁶⁸ Through colluding the oligopolists are able to maximise profit by acting like a monopoly. To maximise industry profit, the oligopolists restrict output to the rate that makes the industry marginal cost (MC) and marginal revenue (MR) equal. The economic profit that is made is the maximum total profit that can be made when colluding as oligopolists.⁶⁹

Figure 2 Oligopoly profit maximisation⁷⁰



If the oligopolists do not collude, the producer must make presumptions about the strategies that the other producers on the oligopolistic market will make to maximise their profits. Different theories exist about the assumptions that the producers make in their effort to maximise profit. The first real theory was introduced by Cournot. He thought that the producers choose their profit-maximising quantity of output, with the premise that the quantity of their rivals was fixed. Cournot found that there existed a stable price-quantity equilibrium, i.e. an outcome in which no producer has an incentive to change his level of output, given the output of his rivals. The theory has encountered severe criticism and the

⁶⁷ Friedman, James, (1983). pp. 2-3 and Parkin, Michael et al., (1997). p. 299-300.

⁶⁸ Friedman, James, (1983). p. 2

⁶⁹ Parkin, Michael et al., (1997). pp. 325-326

⁷⁰ Figure to be found in Parkin, Michael et al., (1997). p. 298. "Economic profit" and "deadweight loss" added to the figure.

main criticism originate in that Cournot's initial premises are unrealistic. Cournot assumed that the quantity of output supplied is the main decision for the producer. The producers choose their outputs and then offer them on the market, which results in a price that is just enough to equate quantity demanded with quantity supplied.

Another theory, invented by Bertrand, suggests it is the price that is the key decision variable. The producers set the price and then let the buyers decide whether and how much to purchase at that price⁷¹. When Cournot put emphasis on market concentration and producer's market shares as indicators of market performance, Bertrand highlights product differentiation. The products of two producers are rarely completely identical. They can be physically identical, but differ when it comes to location of the distributor, the terms of credit offered with the sale, the service offered after the sale etc. In this model, when the producers set the price and sell whatever is demanded at that price, the critical factor which decides the market performance is the grade of product differentiation. With only few producers that sell almost identical products, market performance will approach the ideal of a competitive market. If the products instead are more differentiated each producer will be able to achieve near-monopoly market power over its own brand. If specific brands are a decisive factor for the customer when buying a product, price competition will be weak and the equilibrium price approach the monopoly level.⁷²

4 Legal theory

The concept of oligopolistic dominance could be interpreted not only under the EC Merger Regulation, but also under article 85 and 86 the Treaty of Rome. The interpretations made by the ECJ and the Commission are worth knowing in order to be able to analyse the Merger Regulation. A summary of the most important notions is here to be given - stating the main features of article 85 and 86 regarding oligopolistic dominance, before entering into the analysis of the EC Merger Regulation.

4.1 Article 85

The Treaty of Rome is the main document in the European Union - containing the "laws" of the Union. The underlying goal is to integrate the economies of the member states, with a view to become one economic unit. Hence, rules like free movement of goods and people across borders and fierce competition to support an effective market have been established. Article 85 and 86 in the Treaty contain the antitrust rules of the Union. Neither one of the two articles specifically deals with mergers, nor do any other part of the Treaty. Mergers were no real problem when the Community was established. The member states strived for reducing barriers of trade and integrating the economies - mergers were an important means of this integration while increasing efficiency. The economic problem was not undertakings growing

⁷¹ Sherer, F.M. & Ross, David, (1990). pp. 200-201

⁷² Martin, Stephen, (1988). pp. 119-125

too big or becoming too powerful and thereby no incentive existed to prevent the creation of mergers in the Treaty.⁷³

Article 85 is the main article to control anti-competitive behaviour by cartels. In paragraph 1 the article provides:

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 have as their object or effect the prevention, restriction or distortion of competition within the common market...

The meaning of "concerted practices" has led to some controversy and been defined in several cases. Its primary aim is to bring under its control forms of collusive behaviour which do not fall under agreements or decisions by associations of undertakings. Undertakings should not be able to avoid the anti-competitive rules by establishing a lesser degree of formality that is inherent in agreements or decisions. The ECJ has stated that a concerted practice does not have to have all the elements of a contract, but could simply arise out of co-ordination which becomes clear from the behaviour of the participating undertakings⁷⁴. The same case concluded that parallel behaviour could not of itself lead to a concerted practice, but although be strong evidence of the same⁷⁵. Further it is contrary to the meaning of the Treaty for a producer "to cooperate with his competitors, in any way whatsoever, in order to determine a coordinated course of action relating to price increase..."⁷⁶. In another case the ECJ widened the definition, stating that it is not necessary to work out an actual plan for a co-ordination or co-operation to be a concerted practice⁷⁷. The existence of an information change is also enough to conclude that a concerted practice has been at stake, although there might have been no "contacts" between the undertakings⁷⁸. Hence, there has to be a co-ordinated behaviour where co-operation is knowingly substituted for competition, the co-ordination must be a result of direct or indirect contact and the purpose of such contact was to affect market behaviour, for a concerted practice to be established. The ECJ has also concluded that the concept of concerted practice does not extend to non-collusive parallel behaviour and a concerted practice can not be presumed to have taken place merely because of observed parallel behaviour, unless it is found in an economic evaluation that collusion is the only possible explanation⁷⁹. This is the main weakness of article 85 leading to article 86 given more importance regarding the question of oligopolistic markets and oligopolistic dominance.⁸⁰ Another weakness of article 85 is that the close links to economic analysis inherent in the concept of oligopolies is not reflected in the article and thereby the article tends to be a too blunt legal instrument to deal with the subject. Rodger thinks that the effect of article 85 is mainly restricted to cartel agreements or arrangements.⁸¹

Jenny emphasises the efficiency issue, which according to him is embedded in article 85

⁷³ Fox, Eleanor M., (1991). "Merger Control in the EEC - Towards a European Merger Jurisprudence", *Fordham Corp. L. Inst.*, p. 711-712

⁷⁴ Case 48/69 *ICI v Commission* [1972] ECR 619, CMLR [1972] 557

⁷⁵ If the parallel behaviour could be shown to have led to conditions of competition which were not those that could be normally expected on the market in question.

⁷⁶ *ibid.* para. 114.

⁷⁷ Case 40/73 *Suiker Unie v Commission* [1975] ECR 1663

⁷⁸ Case 172/80 *Zuchner v Bayerische Veriensbank* [1981] ECR 2021

⁷⁹ Cases 89,104, 114, 116, 117, 125-129/85 *Woodpulp* [1988] ECR 5193 and Case *Cartonboard* OJ 1994 L243/1

⁸⁰ Soames, Trevor, (1996). "An Analysis of the Principles of Concerted Practice and Collective Dominance: A Distinction without a Difference?", *1 ECLR*, pp. 25-30

⁸¹ Rodger, Barry J., (1994). "Market Integration and the Development of European Competition Policy to Meet New Demands: A Study of the Control of Oligopolistic Markets and the Concept of a Collective Dominant Position Under Article 86 of the EC Treaty", *LIEI 1994/2*, pp. 12-14

and the increase of which is the purpose of competition policy. The Commission is in general reluctant to allow behaviour that distort competition, but contribute to economic progress - some cases do exist. The Commission has in the past allowed capacity closure agreements for producers of synthetic fibers⁸², bilateral transfers, specialisation agreements and joint ventures in the petrochemical industry and stated that in industries where there exist rapid changes in technology and fast changes in the economic and regulatory context, it could be justified to accept agreements with anti-competitive effects if they also are able to have positive effects in terms of static or dynamic efficiency (innovations). Jenny does admit that it is difficult to hold on to this efficiency defence under article 85(3) today, since article 86 when prohibiting abuses of dominant positions does not allow this kind of defence. Also article 2 the EC Merger Control Regulation seems to embed not only an efficiency defence, but moreover an "efficiency attack", i.e. the Commission tend to find a merger all the more incompatible with the Common Market the more the merger is considered to enhance efficiency (either through innovation or reduction of costs).⁸³

In conclusion, the scope of article 85 is rather wide and include anti-competitive behaviour between undertakings where there has been some kind of contact between them, but non-collusive behaviour does not fall under the article. Observed parallel behaviour is not enough to prove concertation, unless there is no other reasonable explanation. Finally, it is not necessary for the undertakings to be individually or collectively market dominant for a concerted practice to be at stake.⁸⁴

4.2 Article 86

In which way is article 86 applicable regarding the concept of oligopolistic dominance and oligopolistic markets? The article provides that:

Any abuse by one or more undertaking of a dominant position within the Common Market or in a substantial part of it should be prohibited as incompatible with the Common Market in so far as it may affect trade between Member States...

Flint thinks it is rather clear that article 86 covers the situation when several undertakings collectively hold a dominant position. A material prohibition of abuse of oligopoly power is to be found in the article and thereby it should be possible to bring under the article the non-collusive parallel behaviour of the oligopolists (in contrast to article 85 where this is not possible).⁸⁵ This opinion is contrary to the findings in the case of *Hoffmann-La Roche*⁸⁶ where the ECJ stated that oligopolistic but non-collusive parallel behaviour fell outside the scope of article 86.

The words "one or more undertaking" have been controversial and both a narrow interpretation and a wide interpretation exist regarding whether the words should include or exclude undertakings operating in an oligopolistic market. According to the narrow view the words are an explicit reference to the economic entity doctrine under Community competition law⁸⁷. Thereby "one or more undertaking" refers to separate legal entities constituting one economic

⁸² A capacity closure agreement was here considered possible since the industry had experienced a huge capacity surplus owing from a misjudgement of expected growth of the market and policies of expansion by public undertakings in some member states.

⁸³ Jenny, Frédéric, (1992). "EEC Merger Control: Economies as an Antitrust Defense or an Antitrust Attack?", *Fordham Corp. L. Inst.*, pp. 592-594

⁸⁴ Soames, Trevor, (1996). p. 38

⁸⁵ Flint, David, (1979). pp. 60, 73

⁸⁶ Case 85/76 *Hoffmann-La Roche v Commission* [1979] ECR 461, CMLR 3 [1979] 211

⁸⁷ See Case 6/72 *Continental Can Co Inc v Commission* [1973] ECR 215, [1973] CMLR 199

entity and the act constituting abuse of a dominant position is then attributable to the whole group. The wider definition refers to the possibility of including under article 86 oligopolistic markets in terms of "economically" and legally independent undertakings who hold a collective dominant position on a market.⁸⁸

Two important decisions dealing with oligopolistic dominance under article 86 are the *Magill*⁸⁹ case and the *Italian Flat Glass*⁹⁰ case. The first case concerned an Irish publication company which wanted to distribute a weekly listing of TV programmes in competition with three other publication companies. The other companies refused to supply *Magill* with the necessary information to be able to produce the listing and *Magill* had to cease publication after national proceedings. The Commission decided to initiate proceedings against the three companies for their refusal to co-operate with *Magill*. The Commission thought that an abuse of article 86 was at stake. This was not explicitly a case of oligopolistic dominance, but the fact that each undertaking at the same competitive market acted similarly, the result was that the damage occurred because of the parallelism between the undertakings and thereby a collective dominant position is implicitly at stake. This is further emphasised since there was no competition between the three oligopolists and that potential customers were in a relationship of economic dependence with the oligopolists.

The second case, the *Italian Flat Glass*, directly deals with the question of oligopolistic dominance under article 86. The word undertaking was here found to have the same meaning as under article 85, i.e. referring to "two or more economic entities which are capable of competing with each other". A glass cartel was created by three Italian glass producers being an infringement of article 85(1). This did not stop the application of article 86 in the same case, since abuse of an oligopolistic dominant position was found by the Commission. The Court of First Instance concluded 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 the fact, together they hold a dominant position *vis-à-vis* the other operators on the same market.". Thereby it is not necessary for the undertakings on the market to constitute one economic entity to fall under article 86 and the provisions of abuse of a dominant position. It is still uncertain whether "economic links" is a necessary requirement to constitute an oligopolistic dominant position and the precise meaning of economic links is also unclear.⁹¹ According to statements given by the ECJ in more recent merger cases, its intention was only to refer to links of a structural nature by way of example and it did not intend to lay down that such links must exist in order for a finding of collective dominance to be made.⁹² Hansen et al. think that it is unclear if the use of article 86 on an oligopolistic dominant position requires an oligopolistic market structure, since the ECJ has laid down such restrictive conditions for an oligopolistic dominant position to be established. The overall use of article 86 in the matter is thereby not extended with the ruling in the *Italian Flat Glass* case, although the ECJ has admitted that a dominant position could include several undertakings.⁹³

The question of economic links was further investigated in the case of *Almelo*⁹⁴ regarding

⁸⁸ Rodger, Barry J., (1994). pp. 15-16

⁸⁹ Case *Magill TV Guide* No. IV/31.851 (Dec. 21, 1988), OJ L78/43 (March 21, 1989)

⁹⁰ Case *Italian Flat Glass* OJ [1989] L33/44, CMLR 4 [1990] 535

⁹¹ Rodger, Barry J., (1995). "Oligopolistic Market Failure: Collective Dominance versus Complex Monopoly", 1 *ECLR*, pp. 22-24

⁹² See Case T-102/96, *Gencor v Commission of the European Communities*, (Feb. 26, 1999).

⁹³ Hansen, Marc, et al., (1994). "Oligopolistisk dominans efter EF fusionsforordningen", *SvJT*, häfte 5/6, p. 481

⁹⁴ Case C-393/92 *Almelo* [1994] ECR I-1477

the regional electricity distribution in the Netherlands. The ECJ found that the distributors held a collectively dominant position if they were bound together by "sufficiently close economic links". The strong links could be economic or otherwise, provided that they lead the undertakings to adopt the same conduct on the market. The case made it possible to bring under article 86 parallel behaviour which is not collusive but where the undertakings in question have some common link except the fact that they operate in the same oligopolistic market but short of collusive behaviour.⁹⁵

Cooke refers to two main limitations of the article. First, it does not appear to be applicable where a dominant market position is created through a merger, but instead where an existing dominant position is strengthened. Secondly, the article can only be applied where an abuse has already occurred.⁹⁶ Rodger concludes that neither article 85 or article 86 is the appropriate tool to deal with the question of oligopolistic market positions and oligopolistic markets and suggests that another tool is being used.⁹⁷ Another opinion regarding article 86, states that the extension of the article to cover parallel behaviour would undermine the notion of concerted practice under article 85(1). If the Commission only has to prove oligopolistic dominance and parallel behaviour under article 86, instead of conscious collusion under article 85(1), the investigative burden of the Commission would be considerably lightened. Shaw does not suggest that such a step is taken.⁹⁸

4.3 Article 85 and article 86 taken together

In some cases the relationship between article 85 and article 86 has been considered an important issue. Does the application of one of the articles exclude the application of the other? Are there situations where both articles have to be applied together? The main difference between the two articles is that article 85 only covers collusive behaviour, when it is enough in article 86 that a parallel behaviour is established or links of any kind present. The result being article 86 covering more than article 85.

In the above mentioned case *Italian Flat Glass* the Court concluded it is not necessary, when establishing an abuse of article 86, to recycle the facts which are the basis for an infringement of article 85. It makes no point to attack the same behaviour under both the articles according to Rodger.⁹⁹ Soames mentions the controversy existing whether it is proper to apply article 86 to a factual situation that as well may fall under article 85(1). An agreement or concerted practice between undertakings that can be considered to be jointly dominant and has adverse effects on competition is able to fall under both articles simultaneously. A limit amount of case law suggests the opposite¹⁰⁰, but the cases in favour of the statement are more convincing¹⁰¹. In *Tetra Pak I*¹⁰² the court stated that the application of article 85 to an agreement may not preclude the alternative application of article 86. In the decision of

⁹⁵ Soames, Trevor, (1996). pp. 33-34

⁹⁶ Cooke, Terence E., (1986). *Mergers & Acquisitions*. p.105

⁹⁷ Rodger, Barry J., (1995). pp. 23-24

⁹⁸ Shaw, Josephine, (1989). p. 99

⁹⁹ Rodger, Barry J., (1995). p. 24

¹⁰⁰ For example Case 172/80 *Zuchner v Bayerische Vereinsbank* [1981] ECR 2021

¹⁰¹ See for example Case 85/76 *Hoffmann-La Roche v Commission* [1979] ECR 461 CMLR 3 [1979] 211, Case 66/86 *Ahmed Saeed Flugreisen v Zentrale zur Bekämpfung Unlauteren Wettwerbs* [1989] ECR 803, Case T-51/89 *Tetra Pak Rausing v Commission* [1990] ECR II 347, Case *Italian Flat Glass* OJ [1989] L33/44 CMLR 4 [1990] 535 and Case C-393/92 *Almelo* [1994] ECR I-1477.

¹⁰² Case T-51/89 *Tetra Pak Rausing v Commission* [1990] ECR II 347

*European Sugar Industry*¹⁰³ the Commission found both article 85 and article 86 applicable. Concerted practices contrary to article 85(1) was found as well as infringements of article 86.

4.4 Article 2(3) of the EC Merger Control Regulation 4064/89

It was not until about ten years ago that a regulation concerning mergers and relating questions came into being in the European Union. The need for a regulation had then been urgent for some time. Internal institutional dynamics and a vision of creating the single European market were two important factors for the process. Companies were starting to restructure at the time, leading to an increase in cross-border mergers and acquisitions. Also at the governmental level changes were made. New norms for the Council were introduced with the Single European Act leading to an increase in integration and neo-liberal influences. Taken together the natural development was a regulation stating the rules for mergers.¹⁰⁴

4.4.1 The EC Merger Control Regulation

The first step towards a merger regulation was taken already in 1973. The Commission made a proposal where all mergers should fall under the regulation, unless they did not belong to the group falling below the thresholds. There was a consensus regarding granting the Commission the powers to regulate mergers.¹⁰⁵ In the 1980s the adoption of a merger regulation became a priority. The EC Merger Control Regulation developed as a complement to article 85 and article 86. The Regulation came into effect in September 1990 and has now to some extent superseded the effectiveness of article 85 and article 86.¹⁰⁶

Mergers which fall under the Regulation must be pre-notified to the Commission and fines can be imposed if the notification is not done. The Commission should decide whether the notified merger falls under the Regulation or not and if it could be said to comply with the Common Market. If the Merger Regulation is applicable, the Commission investigates if the merger might create or strengthen a dominant position, which leads to a distortion of competition. If this is the case the merger must be declared incompatible with the Common Market and thereby prohibited. If the merger falls under the Merger Regulation the member states are prohibited from applying their domestic merger control laws.¹⁰⁷

The central article for this thesis is article 2(3) stating 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.

As can be seen the test is broader than that in article 86, since it is enough that a dominant position is created for a merger to be prohibited, in contrast to the strengthening of a dominant position that is needed for a merger to be incompatible under article 86. The creation of the dominant position must though significantly impede effective competition.¹⁰⁸ The controversial issue and the main question is whether oligopolistic dominance can be regarded

¹⁰³ Case *European Sugar Industry* No.IV/26.918 (Jan. 2, 1973), OJ L140/17 (May 26, 1973)

¹⁰⁴ Bulmer, Simon, (1994). "Institutions and Policy Change in the European Communities: the Case of Merger Control", *Public Administration*, vol. 72 autumn, pp. 432-433

¹⁰⁵ *ibid.* pp. 433-434

¹⁰⁶ Begg, P.F.C., (1991). *Corporate Acquisitions & Mergers*. pp. 8.59-8.60, 8.74

¹⁰⁷ *ibid.* p. 8.74

¹⁰⁸ *ibid.* p. 8.100

as falling under the scope of the EC Merger Control Regulation and in particular article 2(3). The article is going to be separated into smaller parts to state the legal status of the article and the ability of oligopolistic dominance to be included under the article. Though, the analysis below does not intend to go too far, since much is to say about each part and a deeper analysis might blur the main focus of the thesis.

4.4.2 Concentration

Definition of a concentration is to be found in the Regulation and the question is whether an oligopoly falls under this definition. Article 3 the Regulation states that:

1. A concentration shall be deemed to arise where:

(a) two or more previously independent undertakings merge, or

(b) one or more persons already controlling at least one undertaking, or one or more undertakings acquire, whether by purchase of securities or assets, by contract or by any other means, direct or indirect control of the whole or parts of one or more other undertakings.

The term "merge" is not defined in the Regulation, but is most likely to refer to the concept of "fusion", i.e. the transfer of all the rights and liabilities from an undertaking that has been purchased to another undertaking - the result being the purchased undertaking ceasing to exist.¹⁰⁹ The decisive characteristic of a concentration is the change in control that occurs when a transaction is carried through. The article carries on in paragraph 3 and 4 article 3 to define control and holders of control. In each case it is thereby necessary to find out whether a change in control has occurred or not. In its XXI:s Report the Commission defines control as "the possibility of exercising decisive influence on an undertaking".¹¹⁰ The method of acquiring control is not that important and control could be both solely or jointly held. A summary of some of the cases dealing with the change of control views the position of the Commission, as finding important if the rights held by an undertaking makes it possible for that undertaking to control, solely or jointly, the strategic behaviour of another undertaking. Of special importance is the ability to approve budgets or control expenditure and to approve new products or management tasks. The main question is thereby whether an undertaking is able to take strategic decisions affecting another undertaking.¹¹¹

There are different kinds of concentrations, some to be mentioned here.

- *the acquisition of sole control*; this form of concentration occurs when an undertaking buys shares in another undertaking resulting in the acquisition of over 50 percent of the voting rights or the control of the Board, perhaps both (normally it is the latter). It is though possible that an agreement exists where the minority shareholders jointly take strategic decisions with the majority shareholders. Another possibility occurs when not holding 50 per cent of the shares, a factual ability to take strategic decisions owing to that many shareholders do not turn up at the annual meeting.
- *acquisition of joint control*; when acquiring less than 50 per cent of the shares a joint control of an undertaking might occur. The Commission seems to only consider joint control where no possibility exists to shift alliances. It should not be possible, for instance, for three undertakings with shares in a fourth undertaking to change the identity of those who control the undertaking by making alliances for each strategic decision, excluding one of the shareholders. Thus, it should be necessary for each shareholder to have veto rights over strategic decisions relating to the commonly controlled undertaking.

¹⁰⁹ *ibid.* p. 8.75

¹¹⁰ Commission of the European Communities, (1992). *XXIst Report on Competition Policy*. p. 352.

¹¹¹ Jones, Christopher & González-Díaz, Enrique, (1992). *The EEC Merger Regulation*. pp. 5-7

- *joint bidding*; whether a joint bid constitutes a concentration or not rests upon the examination of the planned management of the assets. The division of the spoils should be done as soon as possible for the Regulation to apply.
- *purchase of options*; it is possible that an acquisition of an undertaking take place in stages. The first step is to acquire a minority holding of shares with an option to purchase further shares later. The Commission does not seem to consider the holding of an option in itself to be evidence of joint or sole control. It is first when the purchaser decides to use its option that a change in control might occur.
- *passage from minority to majority: from joint to sole control*; this might have an impact on competition but most likely not.
- *break-up of an undertaking*; a change in the quality of control might constitute a concentration, for example an undertaking might first have only a minority interest over larger assets, but after a change in the quality of control achieves full control over the assets in question.
- *management buy-outs*; could most possibly have an effect upon competition. This is not under the scope of the Regulation as constituting a concentration, unless the individuals that acquire sole or joint control in an undertaking already control at least one undertaking.¹¹²

A concentration must also have a "community dimension" to fall under the Merger Regulation. This is defined in article 1(2) the Regulation. Worth noticing is that the definition might bring several non-EU undertakings under the Regulation, since it is enough that two of the undertakings fulfil the turnover requirements.¹¹³

4.4.3 A dominant position

The concept of dominance is a widely discussed matter in competition law and a short introduction to the concept is only to be given here. The first real statement made by the ECJ was in 1978 in relation to article 86 the Treaty of Rome, saying that a dominant position is:

*a position of economic strength which enables an undertaking to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.*¹¹⁴

This definition has in later decisions been revised, adding more features to the concept¹¹⁵. The definition, although established in cases concerning article 86, is considered to be applicable to the Merger Regulation as well. Some differences do exist between the analysis of dominance under article 86 and the Merger Regulation. The Merger Regulation focuses on the prohibition of the creation *or* strengthening of a dominant position, where article 86 prohibits abuses of a dominant position and not the creation thereof. The Merger Regulation focuses on future effects of a transition and thereby the analysis tends to be more structural and forward-looking than under article 86.¹¹⁶

The basis for the Commission's analysis of dominance under the Regulation appears to be the close link that exists between the ability to act independently and the corresponding ability to raise prices. But it is though not enough to establish a dominant position on the mere fact that an undertaking has the ability or will to raise prices. It is rather a number of structural

¹¹² Jones, Christopher & González-Díaz, Enrique, (1992). pp. 8-13

¹¹³ Craig, Paul and de Búrca, Gráinne, (1997). p. 989.

¹¹⁴ Case 27/76 *United Brands v Commission*, [1978] ECR 207, para 65.

¹¹⁵ See for instance Case 85/76 *Hoffmann-La-Roche v Commission*, [1979] ECR 461, CMLR 3 [1979] 211.

¹¹⁶ Hawk, Barry E. and Huser, Henry L., (1996). pp. 169-170.

factors, indicating if the undertaking is to some extent independent, that are important and thereby different factors are considered in different cases.¹¹⁷ Hence, each dominant position is defined according to individual circumstances existing on the relevant market. Factors that are given importance in the examination are among others:

- *market shares*; are able to show the strength of the undertaking on the market, but are also an important factor when establishing the strength of possible remaining competitors on the market, since it provides a more total picture of competition on the market in question.
- *immunity of counter-measure*; to be in a dominant position also requires a non-need to take the actions of other undertakings into question when deciding its own market strategy. For example an undertaking holding a dominant position should not be forced to lower its own prices to keep its market shares, as a response to price cuts of other undertakings.
- *access to substitutes*; if close substitutes to the product supplied by the dominant undertaking exist, this would most likely reduce the market shares for this undertaking and thereby also its market power.
- *barriers to entry*; with no barriers to entry competition is more likely to occur on the market. Could for instance be a large capital investment, sunk costs etc.
- *other factors*; technical lead through patent protection or know-how, the development of sales network, the degree of vertical integration etc.¹¹⁸

To conclude Neven et al. states that the Regulation does not make any further restrictions on the way the concept of dominance is to be analysed and this seems to be very likely.¹¹⁹

4.4.4 Significant impediment of effective competition

To secure effective competition is one of the primary aims of the Common Market within the EU. Through competition the market should be able to provide the consumers with the desired products at the lowest price possible and using a minimum of resources. Competition should in other words promote economic efficiency.¹²⁰ Jones & González-Díaz think that the phrase "significant impediment of competition" should be seen as an integral part of the examination of dominance, especially related to the question of potential entry into the relevant market. The phrase is actually mentioned and to some extent discussed in the case of *Aérospatiale-Alenia/de Havilland*¹²¹. According to them it is also possible that the term introduces a *de-minimis* factor into the analysis, although a defence like this does not exist under the Regulation¹²².¹²³ One problem discussed by legal writers is the possibility to achieve a dominant position and *not* impeding competition, but instead reducing costs and thereby achieve economic efficiency¹²⁴. Neven et al. do not hesitate to consider such mergers as ought

¹¹⁷ Jones, Christopher & González-Díaz, Enrique, (1992). pp. 130-133.

¹¹⁸ Frazer, Tim, (1992). *Monopoly, Competition and the Law*, 2nd ed. pp. 28-30.

¹¹⁹ Neven, Damien et al., (1993). pp. 4-5.

¹²⁰ Craig, Paul and de Búrca, Gráinne, (1997). pp. 997-998.

¹²¹ Case *Aérospatiale-Alenia/de Havilland*, No. IV/M.053 (Oct. 2, 1991), OJ L 334/42 (Dec. 5, 1991), CMLR 4 [1992] M2

¹²² What they are considering is a situation where an undertaking that already holds a dominant position acquires another undertaking, but the increase in market shares is very small, perhaps only about 5 percent. Should it then be possible for the Commission to conclude that the transaction does not significantly impede competition although the market shares of the undertaking has risen to about 50 percent?

¹²³ Jones, Christopher & González-Díaz, Enrique, (1992). pp. 166-167.

¹²⁴ See the different views taken by Jenny, Frédéric, (1992) and Overbury, Colin H., (In: *EEC Merger Control*, Jones, Christopher & González-Díaz, Enrique, (1992)). Jenny thinks that the Commission might even hold such efficiency against the parties, when Overbury emphasises the fact that a dominant position is but just a dominant position and when established, the effects of it has to be considered.

to be approved. It is of considerable value, according to them, to approve efficiency-enhancing mergers that would not otherwise have been approved because they would harm competition. The mere value is considered to be the benefit of the approval.¹²⁵

4.4.5 The relevant market

The relevant market is defined by Neven et. al, as the narrowest market to which merging parties belong and the market in which a monopolist or a group of perfectly co-ordinating oligopolists are able to achieve some degree of market power.¹²⁶ The relevant market is often divided into the relevant product market and the relevant geographic market.

4.4.5.1 The relevant product market

The Merger Regulation does not in itself include a definition of the relevant product market. Form CO¹²⁷ might be of some guidance, but focusing only on demand side criteria.¹²⁸ Section 6 of form CO states:

A relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use. A relevant product market may in some cases be composed of a number of individual products and/or services which presents largely identical physical or technical characteristics and are interchangeable.

This definition has inspired the new Commission notice on the definition of the relevant market for the purposes of Community competition law¹²⁹, in which an almost identical definition is given. When defining the relevant product market under the Merger Regulation the Commission takes into consideration the substitutability of the products and the same procedure is applicable if the merger concerns services rather than products. It is mainly an economic analysis that is to be used when examining the substitutability of the products, using demand cross-elasticity¹³⁰. The substitutability of two products has been discussed in several cases lying before the ECJ and a number of factors are relevant to the analysis.

Physical characteristics of the product or service and intended end use is one of the characteristics present in the analysis. It is rather logical that two products which are physically very different, in such a way that they are not able to be used for the same end use, are not able to be substitutable. In *TetraPak/Alfa-Laval*¹³¹ the products under consideration were aseptic liquid packaging machines and non-aseptic machines and their substitutability for each other. The end use of the machines were different and also the products as such were considered to be different, i.e. having a low substitutability. The result being the Commission separating the two product markets.

¹²⁵ Neven, Damien et al., (1993). p. 202.

¹²⁶ *ibid.* pp. 47-48.

¹²⁷ Form CO is not actually a form, but rather instructions about what is to be included in a notification of a concentration.

¹²⁸ Hawk, Barry E. and Huser, Henry L., (1996). pp. 123-124.

¹²⁹ Commission notice on the definition of the relevant market for the purposes of Community competition law, OJ C 372 (Dec. 9, 1997). "A relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use."

¹³⁰ Cross elasticity of demand measures the competitiveness of two products, considering the reactions of price changes to purchasers. If a high cross-elasticity exists, a small price rise in one product will cause a large shift in demand to the other. If, on the other hand, cross-elasticity is low a high price rise will be necessary to be able to shift demand to the other product.

¹³¹ Case *TetraPak/Alfa-Laval*, No. IV/M.068 (July 19, 1991), OJ L 290/35 (Oct. 22, 1991).

Price is another factor establishing a product market. If two products have very different prices, it is unlikely that they are substitutable. For example a shirt from H&M and a shirt from Versace in general have the same functions (probably not socially), but are not able to be substitutes for each other. The consumers of shirts from H&M would not buy a H&M shirt if the price was approaching that of a Versace shirt. The price was a decisive factor in the case of *Digital/Kienzle*¹³² concerning markets for mini-computers. The market in question supported both a limited number of users and several users. Both the small and the large computers are able to carry out the same functions, but a distinction is possible to do regarding their price (from \$100000 to \$1 million and above \$1 million).

A third factor is consumer preferences. Consumer loyalty could make substitutability difficult between two products and only a very high price rise is able to change this. Since consumer preferences and consumer loyalty are difficult to prove, it has to be shown over a very long time that product loyalty is at stake if being a factor worth while considering.

The price of a product in relation to total cost or expenditure decides how price-sensitive a consumer is. The price sensitivity often depends on the costs to the purchaser, whether it represents a small or large part of the consumer's total income. If only representing a small part, price sensitivity is to be rather low.¹³³

Other factors relevant in the analysis are supply-side substitutability, technological innovation, different types of evidence (economic and non-economic) etc.¹³⁴

In conclusion, none of these factors are able to establish a product market of its own, but the factors have to be considered together.

4.4.5.2 The relevant geographic market

It is not enough establishing a relevant product market, but a geographic market has to be defined as well, since this will reveal actual and potential competitors to the merging undertakings. The relevant geographic market is not defined in the Merger Regulation, but is to be found in Section 6 of Form CO stating that a relevant geographic market:

...comprises the area in which the undertakings concerned are involved in the supply of products and services, in which the conditions of competition are sufficiently homogenous and which can be distinguished from neighbouring geographic areas because, in particular, conditions of competition are appreciably different...

The new Commission notice mentioned above is highly influenced by this definition.¹³⁵ One of the problems when deciding if two areas form part of the same geographic market is whether entry is likely. A market in balance with a high degree of competition resulting in competitive prices, will not make undertakings situated elsewhere entering this neighbouring market, since profit is uncertain due to (above all) high advertising- and marketing costs. If price is rising in the neighbouring market this might though change the situation and make undertakings wanting to enter. The threat of a potential entrant on the market limits the behaviour of the undertakings already acting on the market and thereby these threatening undertakings and their products also have to be included in the geographic market. The area is thereby drawn up by taking into consideration the degree of substitutability, including those areas from which an undertaking is able to act as a producer of substitutes to those products of

¹³² Case *Digital/Kienzle*, No. IV/M.57, OJ C 56/16 (1991), CMLR 4 [1992] M99.

¹³³ Jones, Christopher & González-Díaz, Enrique, (1992). pp. 110-117.

¹³⁴ Hawk, Barry E. and Huser, Henry L., (1996). pp. 124-125.

¹³⁵ The notice states: "*The relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas*".

the merging undertakings. The Commission, after having identified the distinct area or areas in which the merging undertakings operate, often examines a lot of different, structural factors¹³⁶ to be able to determine whether entry barriers do exist that prevent other undertakings acting in the market of the merging undertakings.¹³⁷ The criteria used by the Commission in its evaluation could be divided into four main groups - degree of supply transferability (tariffs/quotas, technical requirements or other barriers to geographic entry, transportation costs etc.), degree of demand transferability (size and bargaining power of customers, local buying preferences etc.), differences in market shares (for the same supplier in different regions) and differences in price, quality and/or service (for the same supplier in different regions).¹³⁸

The examination establishing a geographic market has to be done on a case-to-case basis. Some trends can though be seen. For example markets with regulatory barriers (banking/insurance industries) are most often considered to be national, certain service markets are also often local (food retailers, hotels and restaurants)¹³⁹, the larger the purchasers of the product in question the more likely a market wider than the national is, some products can be either national or geographic markets depending on their state of development - markets are becoming more integrated and consumer preferences or lack of import and distribution infrastructure are developing¹⁴⁰, products which never has been intended to be marketed only nationally and which have high R&D costs resulting in a world wide export are most likely to be Community or world wide markets^{141 142}.

5 Characteristics able to establish an oligopolistic dominant position

Below some important criteria assessing whether an oligopolistic dominant situation is present or not will be discussed and analysed, mainly with the help of case law.

5.1 Concentration ratio and market shares

The market position of the undertakings involved in a transaction which might lead to an oligopolistic dominant position, is one of the first things to be considered and analysed by the Commission. A distinction is being made between duopolies and multi-firm oligopolies.

¹³⁶ For example, regulatory barriers, different local specification requirements, national procurement policies, cross-border import, distribution and marketing infrastructure, transport costs, language, consumer preferences and potential competition.

¹³⁷ Jones, Christopher & González-Díaz, Enrique, (1992). pp. 117-128.

¹³⁸ Commission of the European Communities, (1992). pp. 358-361. See also Hawk, Barry E. and Huser, Henry L., (1996). pp. 146-147.

¹³⁹ See Case *Promodes/Dirsa*, OJ [1990] C 321/16, CMLR 4 [1991] 8.

¹⁴⁰ See for example Case *Varta/Bosch*, No. IV/M.012 (July 31, 1991), OJ L 320/26 (Nov. 22, 1991).

¹⁴¹ See Case *Tetra Pak/Alfa-Laval*, No. IV/M.068 (July 19, 1991), OJ L 290/35 (Oct. 22, 1991) and Case *Aérospatiale-Alenia/de Havilland*, No. IV/M.053 (Oct. 2, 1991), OJ L 334/42 (Dec. 5, 1991), CMLR 4 [1992] M2.

¹⁴² Jones, Christopher & González-Díaz, Enrique, (1992). pp. 128-129.

5.1.1 Measurement

For a market to be characterised as oligopolistic dominant it is likely that a minimum concentration ratio is relied upon. When measuring concentration the Commission is using the market shares of the undertakings involved. This could be an indication, according to Neven et al., the Merger Regulation not including oligopolistic dominance, as market share measures do not allow interactions between undertakings.¹⁴³ In the case of *Alcatel/AEG Kabel*¹⁴⁴ the German authorities claimed that conscious parallel behaviour was at stake. The Commission rejected this proposition, stating that:

"[the Merger Regulation] does not contain a legal presumption of the existence of a collective dominant oligopoly as soon as certain companies attain a certain combined market share."

The Commission looks at the combined market share of the leading firms or it calculates the overall market concentration (for example using the HHI index).¹⁴⁵ In its XXIst Report the Commission states that high market shares can be an indication of the existence of a dominant position. Such an indication might be overruled by other factors, such as the presence of sufficiently strong and active competitors on the market, the buying power of customers or the high possibility of strong market entry. When examining the importance of market shares, the Commission looks at trends of market shares, the time period over which market shares have been held and the market context. Current market shares might reflect future competitive strength. If the market, before the transaction, is characterised by a dominant position based on a high market share, even a small increase in market power might cause a large negative effect on the competitive outcome of the market. Thus, the higher the pre-existing market share, the faster a strengthening of a dominant position is able to occur.¹⁴⁶

Regarding market shares and concentration ratio it could be worth noticing the rule of the German GWB, indicating when undertakings, as there might be a problem of oligopoly, should present their case for the Commission. Section 22(3)(2) presume incompatibility if;

- three or fewer undertakings have a combined market share of fifty per cent or over, or
- five or fewer undertakings have a combined market share of two-thirds or over¹⁴⁷

5.1.1.1 Duopolies

Merger case law suggest, regarding duopolies, a concentration ratio in the range of 70% or

higher for an investigation to be made regarding oligopolistic dominance. On several occasions a ratio between 50-70% has lead to a review, but seldom to a prohibition, divestiture or other remedy. A concentration ratio below 50% has not yet been enough to start an investigation. Although a concentration has a ratio that is very high, indicating a procedure to be taken or a detailed analysis of industry characteristics to be carried through, it is not certain that this is to be the case.¹⁴⁸ In the case of *British Airways/TAT*¹⁴⁹ the Commission did not investigate the likeliness of oligopolistic dominance to be the outcome of the transaction. British Airways here increased its market shares in two city-to-city routes (London/Paris and London/Lyon) the result being that together with Air France they almost completely controlled the route London/Paris and established a 100% concentration ratio on the other route. The

¹⁴³ Neven, Damien et al., (1993). p. 101.

¹⁴⁴ Case *Alcatel/AEG Kabel*, No. IV/M.165 (Dec. 18, 1991), OJ C 6/23 (Jan. 10, 1992).

¹⁴⁵ Briones Alonso, Juan F., (1995b). "Oligopolistic Dominance in Different Jurisdictions", 6 *ECLR*, p. 337

¹⁴⁶ Commission of the European Communities, (1992). p. 363.

¹⁴⁷ Jones, Christopher & González-Díaz, Enrique, (1992). p. 174

¹⁴⁸ Hawk, Barry E. and Huser, Henry L., (1996). pp. 220-222

¹⁴⁹ Case *British Airways/TAT*, No. IV/M.259 (Nov. 27, 1992).

Commission only stated that Air France "reflects a certain degree of competition" on each route and required British Airways to give up a maximum number of slots, but only in the case of another competitor wanting to operate on the routes. In another case, *American Cyanamid/Shell*¹⁵⁰, the Commission regarded four specific characteristics especially important when they accepted a transaction almost resulting in 100% concentration ratio in some member states markets - the characteristics being:

- the likelihood of future fluctuating market shares
- the likelihood of future entry
- the highly heterogeneous and technologically evolving nature of relevant markets
- the likelihood of future changes in demand as ultimate consumers are forced to experiment with alternative forms of weed control

These characteristics are likely to be useful also in other cases regarding other markets.

5.1.1.2 Multi- firm oligopolies

When it comes to multi-firm oligopolies, it is not very common that the Commission takes action. It is likely that a very high three-firm concentration ratio, about 80% or more, will lead to an investigation regarding oligopolistic dominance - at lower ratios a review might take place, but is not facing an immediate danger for the same. It is possible for three undertakings to reach a position of oligopolistic dominance, but the market conditions have to be considerable good. The problems and risks of cheating and joint control increase the more undertakings are involved in the oligopoly. Possible oligopolistic dominance also comes with four- or five-firm concentration ratio, but the problem of including these markets are the fact them being less concentrated. In *Pilkington-Techint/SIV*¹⁵¹ a five-firm concentration ratio of 95% was not enough to take action, although several industry characteristics also indicated that parallel behaviour was possible.¹⁵²

5.1.2 The importance of remaining competitors

An important factor is whether the remaining undertakings on the market are able to make up an alternative source of supply for consumers that usually trade with the oligopolists. If so, price parallelism would be impossible, since any rise in price would lead to the oligopoly losing market shares. Hence, the consumers will be price sensitive *vis-à-vis* members of the oligopoly, but *vis-à-vis* non-members inelasticity will prevail. In evaluating this fact, market shares of the remaining competitors, size and resources of competing undertakings and commercial- and technological advantages of the oligopoly, are important to investigate.¹⁵³

Strong actual competition is a rather common reason for a concentration with high market shares to although be approved. The Commission is then not satisfied with the market shares as indicators of oligopolistic dominance or the definition of market shares could also be too narrow. In the case *Renault/Volvo*¹⁵⁴ a market share of 54% after the transaction, was not enough to indicate oligopolistic dominance since Mercedes, which supplied 18% of the market guaranteed effective competition. In *Aérospatial-Alenia/de Havilland*¹⁵⁵ market shares

¹⁵⁰ Case *American Cyanamid/Shell*, No. IV/M.354 (Oct. 1, 1993).

¹⁵¹ Case *Pilkington-Techint/SIV*, No. IV/M.358 (Dec. 21, 1993), OJ L 158/24 (June 25, 1994).

¹⁵² Hawk, Barry E. and Huser, Henry L., (1996). pp. 222-224 and Briones Alonso, Juan F., (1995b). p. 337.

¹⁵³ Jones, Christopher & González-Díaz, Enrique, (1992). pp. 138-143, 174-175

¹⁵⁴ Case *Renault/Volvo*, OJ [1990] C 281/2, CMLR 4 [1991] 297

¹⁵⁵ Case *Aérospatial-Alenia/de Havilland*, No. IV/M.053 (Oct. 2, 1991), OJ L 334/42 (Dec. 5, 1991), CMLR 4 [1992] M2

was taken as a sign of dominance, but it was not the market share *per se* which indicated dominance, but the fact that the supply market of aircraft can only provide strong competition by large undertakings. On the other hand in *Nestlé/Perrier*¹⁵⁶ the competing undertakings were too small in size and sold only local or regional waters, to be sufficient competitors and prevent conscious parallelism.

Deciding when a competitor is important for a market to be competitive is difficult. A market share of 10 percent is surely enough in a concentrated market. The higher the concentration of the market before the transaction, the more important the remaining competitors in the market get for the maintenance of effective competition.¹⁵⁷ Market shares as a measure do not distinguish a market with many small sellers from one with few big sellers, making market shares as a measure a bad instrument to use.

5.2 Barriers to entry

When evaluating a market position to be non-dominant the Commission looks at "strong evidence of a high probability of strong and quick market entry", since high barriers to entry could be evidence of oligopolistic dominance. The barriers to entry can take several forms, including transport costs, brand awareness and regulatory barriers.¹⁵⁸ In *Nestlé/Perrier*¹⁵⁹ the Commission considered brand awareness, sunk costs (advertisement), the low rate of market growth, high transport costs and the high degree of concentration to be entry barriers, but despite these facts there were several attempts to enter the market for bottled water. If the attempts were successful or not is not quite clear, so barriers to entry are likely to have been important after all. Also in the case of *Pilkington-Techint/SIV*¹⁶⁰ the Commission found evidence for barriers to entry, in the form of sunk costs in capital assets, over-capacity in the market, the technology and know-how skills necessary to run a plant efficiently. All these facts reducing the likelihood of entry into the market. In *Kali+Salz/Mdk/Treuhand*¹⁶¹ legal barriers were considered to prevent market entry (monopoly for marketing potash products in France).

The Commission uses a two-step test, when investigating possible high barriers to entry.

- First, the Commission tries to determine whether market conditions make it easier or impede entry and expansion. Relevant factors are:
 - a, mature demand for the relevant product, i.e. stagnant or declining instead of growing
 - b, low price elasticity of demand
 - c, the existence of governmental, transportation, financial, reputational or other impediments preventing new entrants from entering the market
- Second, the Commission assumes that new entry and expansion will occur and whether it is then possible that all or some of the oligopoly members will act in an anti-competitive manner. When evaluating this fact the Commission is considering if entry and expansion will occur within about 2-3 years in response to a co-ordinated price increase by the oligopoly members.¹⁶²

¹⁵⁶ Case *Nestlé/Perrier*, No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17

¹⁵⁷ Briones Alonso, Juan F., (1995b). p. 338.

¹⁵⁸ Neven, Damien et al., (1993). pp. 113-114

¹⁵⁹ Case *Nestlé/Perrier*, No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17

¹⁶⁰ Case *Pilkington-Techint/SIV*, No. IV/M.358 (Dec. 21, 1993), OJ L 158/24 (June 25, 1994)

¹⁶¹ Case *Kali+Salz/Mdk/Treuhand*, No. IV/M.308 (Dec. 14, 1993), OJ L 186/38 (July 21, 1994).

¹⁶² Hawk, Barry E. and Huser, Henry L., (1996). pp. 225-226

5.3 Barriers to exit

Tacit collusion is more likely to occur when the oligopolists are not able to shift their production to other goods.¹⁶³ Barriers to exit might also indirectly work as a barrier to enter the market for other undertakings, due to the threat of competing with undertakings colluding when not able to shift their production.

5.4 Joint entry deterrence

An entry deterrence game is best explained with two parties (undertakings). Imagine one undertaking (A) already operating in the market and another undertaking (B) that would like to enter the market. A can choose to set its price at the monopoly profit-maximising level or at the competitive (zero economic profit) level. The strategies of B are to enter and set the price just below that of A or not enter at all. The Nash equilibrium of this game is a competitive price at which A will earn a normal profit and B does not enter the market. If A would raise its price to the monopoly level, the outcome is B entering the market and undercutting A's price and thereby taking the whole business, leaving A with an economic loss. A avoids this outcome by choosing the competitive price and deterring B from entering.¹⁶⁴ In the case of *Nestlé/Perrier*¹⁶⁵ the Commission found evidence of joint entry deterrence by the three leading suppliers, i.e. they collectively set the price at the competitive level to deter other suppliers from entering the market. Since there did not exist any oligopolistic dominant situation before the merger it is possible to interpret the wording of the Commission that joint entry deterrence should be regarded as an indicator of possible tacit collusion in the market.

5.5 Market transparency

Market transparency directly affects the ability of the members of the oligopoly to reach a tacit agreement on profit maximising price and output levels. Thereby it also affects the ability to detect and punish those of the members that are "cheating" on the agreement. This latter ability is important from the oligopoly's point of view, since it should prevent members from adopting a short run solution of profit maximising and find it more profitable in the long run to stay with the agreement. More than one factor is important when determining the transparency of a market.¹⁶⁶

5.5.1 Product homogeneity or heterogeneity

Product markets that are relatively homogeneous are more likely to co-ordinate, since low product innovation is present and competition thereby mainly occurs on price. It is more advantageous for the undertakings to collude and avoid price competition.¹⁶⁷ In markets which are heterogeneous, competition also occurs on non-price factors, for example quality and product differentiation. If a large number of product variants exist in the market, i.e. the

¹⁶³ Hansen, Marc, et al., (1994) p. 487 and Winckler, Antoine & Hansen, Marc, (1993). p. 822

¹⁶⁴ Parkin, Michael et al., (1997). p. 333

¹⁶⁵ Case *Nestlé/Perrier*, No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17

¹⁶⁶ Hawk, Barry E. and Huser, Henry L., (1996). pp. 240-241

¹⁶⁷ Briones Alonso, Juan F., (1995b). p. 339.

differentiation grade is high, and each undertaking provides several differentiated products, a possibility to substitute between the products exist.¹⁶⁸ In *Pilkington-Techint/SIV*¹⁶⁹ the Commission stated that product innovation leads to product differentiation and thereby it complicates the emergence of anti-competitive behaviour. It is possible to gain a comparative advantage because of product innovation, but it also introduces unpredictability into the market and reduces the likeliness of stability of the parallel behaviour. The pricing decisions also tend to be more complicated given the differentiation. Price negotiations with customers will include a high degree of bargaining over service, technical specifications etc.¹⁷⁰ Thus, a heterogeneous product makes it more difficult to collude, co-ordination must then occur on more than one marketing variable. If the quality, performance and other characteristics of the product vary over time this is also something that render tacit co-ordination more difficult. The situation tends to be more complex given these facts and collusion is restricted. The product's heterogeneity or homogeneity surely affects the possibility of collusion between members of an oligopoly.¹⁷¹

Clear cases of heterogeneity and homogeneity are very rare and the cases between the two extremes do not reveal very clearly which industry characteristics distinguish the two groups from each other. In *Kali+Salz/Mdk/Treuhand*¹⁷² the relevant product market (for potash) was homogeneous with no clear differentiation and no likely future technological innovation that would change the homogeneity. In contrast the product market (of recorded music) was highly differentiated in *Thorn EMI/Virgin Music*¹⁷³ and also subject to constant changing consumer tastes and popularity of the artists. Between these two cases it is possible to find cases like *Nestlé/Perrier*¹⁷⁴ where the industry of bottled mineral water was considered to be homogeneous because the product was generally sold in identical packaging and product sizes and *Unilever France/Ortiz-Miko (II)*¹⁷⁵, a product market for wrapped impulse-purchase ice cream products, where the market on the other hand was considered to be heterogeneous because of the degree of product differentiation and innovation.¹⁷⁶

5.5.2 Market mechanisms

Mechanisms such as price lists, trade association information exchanges or price leader signalling make it easier to reach a tacit agreement on profit maximising price and output levels, even when the relevant product market is rather differentiated.¹⁷⁷ Only when the undertakings involved are aware of each others pricing decisions are they able to parallel the prices. Transparency can take the form of trade press publishing "typical" or "average" prices and report price changes, but also transparent pricing behaviour of the undertakings, for example announcing standard prices without rebates. Few undertakings on the market, often ensure more transparent prices.¹⁷⁸ In *Mannesmann/Vallourec/Ilva*¹⁷⁹ the Commission found

¹⁶⁸ European Commission, (1995). pp. 62-63

¹⁶⁹ Case *Pilkington-Techint/SIV*, No. IV/M.358 (Dec. 21, 1993), OJ L 158/24 (June 25, 1994)

¹⁷⁰ Briones Alonso, Juan F., (1995b). p. 340.

¹⁷¹ Hawk, Barry E. and Huser, Henry L., (1996). p. 241

¹⁷² Case *Kali+Salz/Mdk/Treuhand*, No. IV/M.308 (Dec. 14, 1993), OJ L 186/38 (July 21, 1994).

¹⁷³ Case *Thorn EMI/Virgin Music*, No. IV/M.202 (April 27, 1992), OJ C 120/30 (May 12, 1992)

¹⁷⁴ Case *Nestlé/Perrier*, No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17

¹⁷⁵ Case *Unilever France/Ortiz-Miko (II)*, No. IV/M.422 (March 15, 1994), OJ C 109/5 (April 19, 1994)

¹⁷⁶ Hawk, Barry E. and Huser, Henry L., (1996). pp. 242-244

¹⁷⁷ *ibid.* p. 244

¹⁷⁸ Jones, Christopher & González-Díaz, Enrique, (1992). p. 175

¹⁷⁹ Case *Mannesmann/Vallourec/Ilva (DMV)*, No. IV/M.315 (Jan. 31, 1994), OJ L 102/15 (April 21, 1994)

that all suppliers issued, regularly, price lists which indicated uniform scales on all types of quality, length, certification, tolerance and other distinctions - thus the underlying aim of the competitors seemed to be a tacit consensus on all grades. In contrast the case of *Rhône-Poulenc/SNIA (II)*¹⁸⁰ dealt with individually negotiated transactions and there did not exist any price lists that could possibly work as signals to competitors.

In industries having a long tradition of issuing regularly detailed price lists, the degree of market transparency is determined through analysing if price lists reflect actual net transaction prices. If not, it is much harder to conclude that the market is under such transparency to be able to lead to oligopolistic collusion. If suppliers in a given industry have numerous, frequent sales and market contact with customers and they thereby are able to give them feedback on prices and other terms of sale offered by competitors, it is also possible for the suppliers to get a "market intelligence" about prices and other terms of sale offered by competitors. The outcome is a facilitated market transparency and an ability to notice "cheating" of the other competitors on the profit maximising price and output levels. It is, though, not perfectly clear that this should be considered as an oligopoly co-ordination factor^{181 182}.

5.5.3 Bid markets

The Commission has concluded in a couple of cases that markets where the transactions are made on the basis of competitive bids for long term systems supply contracts, are not transparent¹⁸³. Effective competition is thereby able to be maintained when the buying power of public buyers are involved.¹⁸⁴ The concentration ratios can though be rather high also in these markets, so it is not possible to say that bid markets as a general rule are not transparent.¹⁸⁵

5.6 Structural or other links

Another factor, which has become more and more acknowledged over the years when discussing oligopolistic dominance is the presence of structural, economic, personal or other links between the members of the oligopoly. Some examples that have been considered constituting links are - minority share-holdings¹⁸⁶ or other capital links, interlocking directors or management¹⁸⁷, co-operation agreements¹⁸⁸, agreements between two leading undertakings to divide different portions of the acquired undertakings business¹⁸⁹ etc. Contacts between

¹⁸⁰ Case *Rhône-Poulenc/SNIA (II)*, No. IV/M.355 (Sept. 8, 1993), OJ C 272/6 (Oct. 8, 1993)

¹⁸¹ This practice is also consistent with the customer bargaining power. Customers are "playing off" one supplier against another, for example they can decide to switch all or some of their requirements if their current supplier does not match or offers a lower price than another supplier. The customers can provide proof of actual lower prices or they can simply bluff, i.e. claim that a lower price is offered with another supplier without presenting the offeror.

¹⁸² Hawk, Barry E. and Huser, Henry L., (1996). pp. 244-247

¹⁸³ See Case *SNECMA/TI*, No. IV/M.368 (Jan. 17, 1994), OJ C 42/12 (Feb. 12, 1994), about aircraft landing gear systems and components and Case *Voith/Sulzer (II)*, No. IV/M.478 (July 29, 1994), OJ C 225/13 (Aug. 13, 1994), about paper machines.

¹⁸⁴ Winckler, Antoine & Hansen, Marc, (1993). pp. 824-825

¹⁸⁵ Hawk, Barry E. and Huser, Henry L., (1996). p. 247

¹⁸⁶ Case *ELF Atochem/Rütgers*, No. IV/M.442 (July 29, 1994)

¹⁸⁷ Case *CCIE/GTE*, No. IV/M.258 (Sept. 25 1992)

¹⁸⁸ Case *Thorn EMI/Virgin Music*, No. IV/M.202 (April 27, 1992), OJ C 120/30 (May 12, 1992)

¹⁸⁹ Case *Nestlé/Perrier*, No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17

members of an oligopoly reduce uncertainty regarding competitive strategies that different undertakings might use and this increase the likeliness of collusion. Structural links are useful tools when stabilising collusive behaviour, since it is possible to detect cheating behaviour more easily and thereby the ability to punish the cheater in time is rising.¹⁹⁰

Whether links of any kind are necessary to establish oligopolistic dominance is not settled yet. Although the Commission once has stated that the existence of structural links is not a necessary condition for the analysis of oligopolistic dominance and the majority of cases do not mention structural links in its analysis of oligopolistic dominance, some cases do support the necessity of structural links. In *Pilkington-Techint/SIV*¹⁹¹ several producer links existed, among others cross-supply links and joint venture links, but they were deemed insufficient or irrelevant to establish an oligopolistic dominant situation, since other industry characteristics showed that these links did not enhance market transparency. In *Kali+Salz/Mdk/Treuhand*¹⁹² a tradition of cartel co-operation was present. The two leading undertakings on the market already co-operated in other regional markets before the present transaction and it was most likely that this co-operation would continue and be extended. They operated a joint-venture company, they jointly marketed their products and they participated in an export cartel - the possibility of communication was high between the undertakings. Considering these facts the Commission ruled that the undertakings involved had to eliminate the close structural links, which were considered to be the main reason to the oligopolistic dominance. The ECJ has recently stated in the case of *Gencor v Commission of the European Communities*¹⁹³ that 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. An oligopoly within which, in a market with the right characteristics, those parties are in a position to forecast one another's behaviour and are therefore strongly encouraged to organise their behaviour in the market, in particular in such a way as to maximise their joint profits by restricting production with a view to increasing prices. Each trader is aware that highly competitive action on its part in order 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. This meaning that economic links should be considered as a factor indicating oligopolistic dominance in the present case, but together with several other characteristics.

Multi-market contacts are most likely to help undertakings signalling their intentions and interests, but also to get information about the strategies of competitors. A complex network connecting several undertakings might arise, influencing both the willingness to collude and the temptation to cheat.¹⁹⁴ Even if links of any kind most of the time do not seem to constitute a necessary requirement for an oligopolistic dominant situation, certain categories, mentioned above, could affect the transparency of the market or increase the likeliness of parallel behaviour.¹⁹⁵ Structural links as such can thereby not be considered to be necessary in order to establish whether a market is oligopolistic or not, according to the present case-law. This further proves that there most likely *not* is a difference between the two concepts of collective and oligopolistic dominance, since they both seem to rely on the independence of the undertakings - undertakings not necessarily having to be tied together by links of any kind.

¹⁹⁰ European Commission, (1995). pp. 52-53

¹⁹¹ Case *Pilkington-Techint/SIV*, No. IV/M.358 (Dec. 21 1993), OJ L 158/24 (June 25, 1994)

¹⁹² Case *Kali+Salz/Mdk/Treuhand*, No. IV/M.308 (Dec. 14, 1993), OJ L 186/38 (July 21, 1994)

¹⁹³ Case T-102/96, *Gencor v Commission of the European Communities*, (March 25, 1999).

¹⁹⁴ European Commission, (1995). p. 54

¹⁹⁵ Briones Alonso, Juan F., (1995b). p. 339

5.7 Market demand and elasticity

Some factors relating to market demand and elasticity of demand increase the likeliness of oligopolistic collusion and oligopolistic dominance. If the market demand is stagnant or declining, relatively price inelastic and steady it is more likely that an undesirable parallel behaviour will occur.¹⁹⁶

5.7.1 Stagnant demand

The market character facing a stagnant demand is one of a zero-sum-game, i.e. growth in a single undertaking's sales can only be achieved if reducing the sales and market shares of competitors. This is not the case if the market is growing. Stagnant demand is thereby more likely to lead to parallel behaviour than growing demand, since competitors will only reduce their production or market shares if this is agreed upon.¹⁹⁷ In *American Cyanamid/Shell*¹⁹⁸ the Commission found that the total consumption in the relevant industry (farmers using crop protection chemicals), was likely to decline in the future, but although regarded this as a feature not indicating oligopolistic dominance. Farmer subsidies were also going to be reduced in the future, leading to a decrease in demand for traditional crop protection chemicals and an increase in demand of lower cost alternative. The overall demand would be reduced, prices would have to decrease and profits would be lower.

5.7.2 Inelastic demand

With an inelastic demand in the market the oligopolists will have an incentive to raise the prices collectively and thereby increase the revenue. If demand instead is elastic no such incentive exists, since this would reduce total revenue and profit.¹⁹⁹ A high price elasticity of demand for an individual undertaking results in that undertaking market a lot more of its product even at small price agreements. An incentive to cheat on the co-operation agreement is thereby also present.²⁰⁰ The Commission ruled in its *Pilkington-Techint/SIV*²⁰¹ decision that a high price elasticity in the undertakings price demand works as a restraint on collusion and increases the tendency to cheat. High elasticity could also indicate a high degree of competition among the undertakings. This could stabilise a collusion since the fear of collapse because of deviation is minimised and also reduce the likeliness of cheating. In *Nestlé/Perrier*²⁰² demand was relatively price inelastic, implying that prices might be increased without fear of losses in volume. A price increase would instead result in an increased total revenue and profits. Consumers on the French market buy and consume mineral water daily, therefore no perfect substitutes exist. The brands are also quite important and the consumers are often loyal to a specific brand, which strengthens the price inelasticity of demand. In other rulings, such as *Unilever France/Ortiz-Miko*²⁰³ the Commission has found the expected growth in demand in the relevant product market to be a destabilising

¹⁹⁶ Hawk, Barry E. and Huser, Henry L., (1996). p. 228

¹⁹⁷ Briones Alonso, Juan F., (1995b). p. 340

¹⁹⁸ Case *American Cyanamid/Shell*, No. IV/M.354 (Oct. 1, 1993)

¹⁹⁹ Hawk, Barry E. and Huser, Henry L., (1996). p. 229

²⁰⁰ European Commission, (1995). pp. 62-63

²⁰¹ Case *Pilkington-Techint/SIV* No. IV/M.358 (Dec. 21 1993), OJ L 158/24 (June 25, 1994)

²⁰² Case *Nestlé/Perrier*, No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17

²⁰³ Case *Unilever France/Ortiz-Miko*, No. IV/M.422 (March 15, 1994), OJ C 109/5 (April 19, 1994)

factor, likely to prevent oligopolistic behaviour. Also in *Rhône-Poulenc-SNIA/Nordfaser*²⁰⁴ a high elasticity of demand was found to prevent an unwanted dominance. Oligopolistic dominance was more likely in the cases of *Mannesmann/Valourec/Ilva*²⁰⁵ and *Holdercrim/Cedest*²⁰⁶ since stagnant demand and low price elasticity were present.

5.7.3 Steady demand

With a steady demand it is more likely that an oligopoly becomes successful. On the other hand, when the market is characterised by customers buying infrequently and in large volumes (so called lumpy demand) or if demand fluctuates - oligopolistic collusion is not likely to succeed, since it is profitable to cheat.²⁰⁷ The Commission ruled in *Voith/Sulzer (II)*²⁰⁸ that lumpy demand for high value products tends to reduce the likeliness of successful collusion. In *SNECMA/TI*²⁰⁹ the market for landing gears was characterised by long-term contracts, which lead the Commission to consider the market not likely to be under oligopolistic co-ordination.

5.8 Variable costs and cost structures

With different cost structures, the members of an oligopoly will face problems holding the oligopoly together, since consensus on profit maximising prices and output levels are hard to reach when the profit maximising solutions tend to be different for the undertakings involved.²¹⁰ In some cases the Commission has tried to establish when oligopoly members have similar costs. In, for example, *Nestlé/Perrier*²¹¹ the costs of the producers were considered to be similar since the principal raw material was "free" (the water), bottling had to occur at the source and existing production technology was "well-established", all these facts reducing the likeliness of any undertaking or producer having a cost advantage.

Variable costs²¹², could be found both to reduce the likeliness of parallel behaviour and to encourage the same. If variable costs constitute a quite high percentage of total costs this is considered to give the undertakings incentive to tacitly collude. On the other hand when it is the other way around, i.e. the variable costs constitute a rather low percentage of the total costs, successful parallel co-ordination is not that likely.²¹³ In *Holdercrim/Cedest*²¹⁴ the variable costs were a rather low percentage of the total costs. This made undertakings operating in the market (for cement) increasing their size of newly-built production facilities (in order to achieve economics of scale). The rather long life of cement plants also meant that there was a considerable difference in the size of all plants operating in the relevant market (and thus scale economics). The Commission found these cost differences to reduce the

²⁰⁴ Case *Rhône-Poulenc-SNIA/Nordfaser*, No. IV/M.399 (Feb. 3, 1994), OJ C 42/13 (Feb. 12, 1994)

²⁰⁵ Case *Mannesmann/Valourec/Ilva (DMV)*, IV/M.315 (Jan. 31, 1994), OJ L 102/15 (April 21, 1994).

²⁰⁶ Case *Holdercrim/Cedest*, No. IV/M.460 (July 6, 1994), OJ C 211/5 (Aug. 2, 1994).

²⁰⁷ Hawk, Barry E. and Huser, Henry L., (1996). p. 230.

²⁰⁸ Case *Voith/Sulzer (II)*, No. IV/M.478 (July 29, 1994), OJ C 225/13 (Aug. 13, 1994).

²⁰⁹ Case *SNECMA/TI*, No. IV/M.368 (Jan. 17, 1994), OJ C 427/12 (Feb. 12, 1994)

²¹⁰ Hawk, Barry E. and Huser, Henry L., (1996). p. 237.

²¹¹ Case *Nestlé/Perrier*, No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17

²¹² Variable costs and fixed costs together form the total costs of production. Variable costs could for instance be wages to labour, rent for machines etc.

²¹³ Hawk, Barry E. and Huser, Henry L., (1996). p. 231.

²¹⁴ Case *Holdercrim/Cedest*, No. IV/M.460 (July 6, 1994), OJ C 211/5 (Aug. 2, 1994).

likeliness of oligopolistic dominance. In *Mannesmann/Valourec/Ilva*²¹⁵ the proportion of fixed costs was rather low, which reduced the incentives to cheat on the collusive agreement creating an anti-competitive outcome. The marginal costs were not declining steeply enough to be able to reduce the likeliness of anti-competitive behaviour. A single undertaking would not gain high marginal profits from additional sales in this situation.

When looking at the U.S. Merger Guidelines, they do not consider variable costs to be a factor worth considering in the analysis of co-ordinated behaviour. The Guidelines (Section 2.12) just indicate that an undertaking probably will have higher incentives to cheat on the collusive agreement, if its "direct and opportunity costs of expanding sales in the relevant market" are low.²¹⁶

5.9 Capacity

Capacity is a factor able both to be an indicator of oligopolistic dominance and on the other hand a factor able to reduce the possibility of the same. The Commission has found parallel behaviour likely, when all the leading undertakings in a rather tight oligopoly have considerable excess capacity - excess capacity working as a factor of convergence. This excess capacity also acts as a threat to constrain cheating by other competitors and as a barrier to entry for undertakings being outside the market.²¹⁷ On the market for stainless steel tubes in *Mannesmann/Valourec/Ilva*²¹⁸ the Commission concluded that chronic excess capacity can be a factor indicating an oligopoly problem. The merger was despite this fact cleared, although DGIV had recommended the opposite since a situation of oligopolistic dominance might be at stake. The majority of the commissioners thought that Japanese and East European imports into the EU and Western Europe would act as an impediment of anti-competitive behaviour by the oligopolists²¹⁹. In *Pilkington-Techint/SIV*²²⁰ fixed costs were a rather large part of the total costs and thereby customers were able to value the position of their suppliers and also negotiate business involving large quantities with the suppliers separately. Here the Commission argued that chronic excess capacity made collusion less likely to occur, because each undertaking could earn a considerable profit by cutting prices to win extra sales units. According to Ridyard the Commission should have considered the collective incentive not to engage in price wars in the case of excess capacity, since this has shown to be a strong factor in favour of parallel behaviour in industries like the one in *Pilkington-Techint/SIV*, i.e. float glass.²²¹

The analysis of excess capacity is to a rather large extent influenced by the 1992 U.S. Merger Guidelines. In Section 2.12 it is stated that when capacity constraints are significant in the relevant market, it is more likely that a smaller undertaking is leaving the co-ordinated price and output levels, thereby facing an excess capacity and lower alternative costs. The Guidelines also states that this situation might be overcome if the leading undertakings also face excess capacity.²²²

²¹⁵ Case *Mannesmann/Valourec/Ilva* (DMV), No. IV/M.315 (Jan. 31, 1994), OJ L 102/15 (April 21, 1994).

²¹⁶ Hawk, Barry E. and Huser, Henry L., (1996). p. 231.

²¹⁷ *ibid.* p. 232.

²¹⁸ Case *Mannesmann/Valourec/Ilva*(DMV), No. IV/M.315 (Jan. 31, 1994), OJ L 102/15 (April 21, 1994).

²¹⁹ Ridyard, Derek, (1994). p. 261.

²²⁰ Case *Pilkington-Techint/SIV*, No. IV/M.358 (Dec. 21, 1993), OJ L 158/24 (June 25, 1994)

²²¹ Ridyard, Derek, (1994). p. 260

²²² Hawk, Barry E. and Huser, Henry L., (1996). p. 233.

5.10 Symmetric and asymmetric oligopolies

Oligopolistic dominant behaviour is more likely to develop in a symmetric market structure than in an asymmetric market structure. The German checklist for merger control says that a symmetrical oligopoly, i.e. an oligopoly consisting of undertakings with similar market shares, comparable resources and comparable facility of access to the supply or sales market, often seems to be anti-competitive. This is so, since any competitive action would be equally apparent to all the undertakings, easily to discover due to transparency and hardly not profitable since they all have the same retaliatory attitude.²²³ For example, if one undertaking reduces its price in a situation where the undertakings have similar cost structures, price inelasticity of demand prevails and no real cost advantage for any of the undertakings exists, the result would be all the other undertakings also reducing their prices leaving them all off with reduced total revenues and profits. If instead only one undertaking is facing considerable cost advantages, he is more likely to cheat on profit maximising price and output levels and thereby threaten future parallel behaviour.²²⁴ Asymmetric oligopolies thereby reducing the likeliness of oligopolistic dominance, since the similarities between the undertakings is not present to a larger extent. In both *Nestlé/Perrier*²²⁵ and *Mannesmann/Valourec/Ilva(DMV)*²²⁶ the Commission was confronted with symmetric oligopolies, contrary to the cases of *Rhône-Poulenc/SNIA II*²²⁷ and *Pilkington-Techint/SIV*²²⁸. In the former case the two main competitors were found to have a considerable technology advantage and therefore the symmetry could not in itself lead to parallelism. Generally asymmetry of market shares should not be able to prevent a thorough analysis of oligopolistic dominance.²²⁹

5.11 Power of purchasers

In the case of oligopolistic dominance it might be possible for powerful and concentrated customers to force their suppliers to compete or to give their suppliers an incentive to stop act collectively. If an order is important enough, it is a pressure on the supplier to make a competitive offer before any of the other suppliers in the oligopoly does so.²³⁰ With a high fragmentation of demand the Commission has found that the possibility for this to happen is almost certainly excluded and the likeliness for oligopolistic dominance to occur could thereby not be disregarded²³¹. In *Knorr-Bremse/Allied Signal*²³² the situation was somewhat different. Here the concentration on the demand side was very high and the technical potentials of the customers (truck manufacturers) to design, develop and produce the components supplied high as well. The customers were also reducing the numbers of suppliers at this particular moment. Taken together a lot of pressure was put on the suppliers and incentives to cheat on the oligopoly existing, reducing the likeliness of oligopolistic dominance. It is possible that a high level of buyer concentration is not enough to say that

²²³ Jones, Christopher & González-Díaz, Enrique, (1992). p. 175

²²⁴ Hawk, Barry E. and Huser, Henry L., (1996). p. 234.

²²⁵ Case *Nestlé/Perrier*, No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17

²²⁶ Case *Mannesmann/Valourec/Ilva (DMV)*, No. IV/M.315 (Jan. 31, 1994), OJ L 102/15 (April 21, 1994).

²²⁷ Case *Rhône-Poulenc/SNIA II*, No. IV/M.355 (Sept. 8, 1993), OJ C 272/6 ((Oct. 8, 1993)

²²⁸ Case *Pilkington-Techint/SIV*, No. IV/M.358 (Dec. 21, 1993), OJ L 158/24 (June 25, 1994)

²²⁹ Winckler, Antoine & Hansen, Marc, (1993). p. 819 and Briones Alonso, Juan F., (1995b). p. 343.

²³⁰ Briones Alonso, Juan F., (1995b). p. 345

²³¹ See Case *Mannesmann/Valourec/Ilva(DMV)*, IV/M.315 (Jan. 31, 1994), OJ L 102/15 (April 21, 1994).

²³² Case *Knorr-Bremse/Allied Signal*, No. IV/M.377 (Oct. 15, 1993), OJ C 298/6 (Nov. 4, 1993)

countervailing purchasing power exists. In *Nestlé/Perrier*²³³ it was found that customers would not be able to countervail the duopoly after the merger. Here it seemed like the power already before the merger was in the hands of the suppliers.

5.12 Stability of market environment

The stability of the market environment, especially stability in production technology and similarities in cost conditions (no strong economics of scale or scope), has been found to be a factor facilitating tacit collusion²³⁴. Furthermore, rapid technological development, ongoing technological research and considerable amounts of money invested to ensure that the product offered always correspond to the needs of the customers, are factors the Commission has taken into account when stating parallel behaviour not likely to occur²³⁵. In the case of different degrees of economics of scale and scope, it is most likely that differences in price preferences will occur. If an undertaking is producing on an inefficient scale, a strategy of expansion of market volume is to be preferred, even if it would mean at lower prices. A strategy like this would reduce the likeliness of a collusive behaviour impeding competition.²³⁶

5.13 Vertical integration

Another factor influencing the competition among oligopolists is the different or similar degrees of vertical integration. This might have effect on the co-operative willingness of undertakings, but also the stability of a collusion. Since undertakings always try to act rationally, the outcome of vertical integration is that as long as it might be considered that vertical integration grants a cost advantage, all undertakings in the market will tend to reach a similar degree of vertical integration. Different degrees of upstream vertical integration could be an obstacle to parallel behaviour, if they show different strategic interests for firms. If we instead have different degrees of downstream vertical integration and they do not influence the costs, it is possible that they might affect the transparency of the market and in that way the stability of parallel behaviour. With different degrees of downstream vertical integration each oligopolist is facing different customers and most likely, different customer constraints.²³⁷ In both *Pilkington-Techint/SIV*²³⁸ and *AKZO/Nobel Industrier*²³⁹ the Commission found varying degrees of downstream vertical integration to reduce the likeliness of parallel behaviour and oligopolistic dominance.

²³³ Case *Nestlé/Perrier*, No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17

²³⁴ See for instance Case *Nestlé/Perrier*, No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17, Case *Pilkington-Techint/SIV* IV/M.358 (Dec. 21, 1993), OJ L 158/24 (June 25, 1994) and Case *Mannesmann/Valourec/Ilva(DMV)* No. IV/M.315 (Jan. 31, 1994), OJ L 102/15 (April 21, 1994).

²³⁵ See for instance Case *Rhone Poulenc/SNIA (II)*, No. IV/M.355 (Sept. 8, 1993), OJ C 272/6 (Oct. 8, 1993)

²³⁶ Winckler, Antoine & Hansen, Marc, (1993). p. 823 and Briones Alonso, Juan F., (1995b). p. 343.

²³⁷ Briones Alonso, Juan F., (1995b). pp. 344-345.

²³⁸ Case *Pilkington-Techint/SIV*, No. IV/M.358 (Dec. 21, 1993), OJ L 158/24 (June 25, 1994)

²³⁹ Case *AKZO/Nobel Industrier*, No. IV/M.390 (Jan. 10, 1994), OJ C 19/13 (Jan. 22, 1994)

5.14 Past pricing patterns

The Commission, when investigating oligopolistic dominance, often considers past parallel behaviour to be an important factor of evidence.²⁴⁰ In *Nestlé/Perrier*²⁴¹ the Commission found evidence of parallel increases in net prices during several years and this owing to lack of transparency in the market. This allowed the suppliers to follow on a regularly basis the behaviour and sales evolution of each other. It could also be the other way around, i.e. price competition in the past makes parallel behaviour unlikely. In *Alcatel/AEG Kabel*²⁴² the Commission ruled (partly) that a decrease in prices of 20% over ten years reduced the likelihood of tacit collusion.

6 U.S. law in oligopolistic markets

To be able to do a thorough analysis it could be appropriate to include an overview of the U.S. approach to merger control in oligopolistic markets. The law of the U.S. has to some extent come further in the case of oligopolistic dominance than the corresponding law of the EU and thereby a comparison could be useful.

The competition authorities in the U.S. focus to a large extent on the preventing of mergers which will permit the exercise of market power where several undertakings act collectively. The goal is to prevent market concentration that might lead to anti-competitive behaviour and which does not fall under the Sherman Act. The degree of concentration is only the starting point for the investigation and the analysis in U.S. merger cases.²⁴³

6.1 The legal basis for merger control

It is mainly three legal rules that are of importance when talking about oligopolies and oligopolistic dominance and they are to be discussed below, as is the principle of conscious parallelism - a useful principle when trying to prove illegal collusion impeding competition.

6.1.1 Legal rules

A general view is that article 85(1) the Treaty of Rome roughly corresponds to Section 1 of the Sherman Act, putting emphasis on the word "conspiracy".²⁴⁴ Section 1 of the Sherman Act prohibits:

"every contract, combination... or conspiracy in restraint of trade or commerce among the several states"

The case law of the U.S. has interpreted these wordings as making illegal *per se* all agreements among competing undertakings to fix prices, restrict or pool output or in any other way to restrict competition. The *per se* rule differs from a *rule of reason* in that it is only necessary for the complainant to prove that certain behaviour was at stake and that it fell

²⁴⁰ Winckler, Antoine & Hansen, Marc, (1993). pp. 825-826.

²⁴¹ Case *Nestlé/Perrier*, No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17

²⁴² Case *Alcatel/AEG Kabel*, No. IV/M.165 (Dec. 18, 1991), OJ C 6/23 (Jan. 10, 1992)

²⁴³ Winckler, Antoine & Hansen, Marc, (1993). pp. 792-793

²⁴⁴ Rodger, Barry J., (1994). p. 11

within the class of practices "so plainly anti-competitive"²⁴⁵ that they were illegal. There is no need for a detailed investigation concerning the economic consequences. Under the rule of reason the court has to make a more in-to-depth analysis concerning the contested practices, the reason why they were implemented, their competitive relevance and their impact on consumers.²⁴⁶

There is some controversy whether Section 2 of the Sherman Act can be applied in the case of oligopolies. Section 2 is generally used in the case of monopolies and to apply the provision on oligopolies imposes some problems. In conclusion it could be said that oligopolists behaving in a parallel way are very difficult to attack if they avoid monopolising practices and do not have formal agreements. The solution provided by Flint is the transformation of the market structure and the splitting up of present oligopolistic undertakings. There has been no success in trying to extend the meaning of Section 2 the Sherman Act to also cover conscious parallelism of oligopolists.²⁴⁷

Section 7 of the Clayton Act prohibits mergers and acquisitions:

"in any line of commerce or in any activity affecting commerce in any section of the country, [where] the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly"

With this Section the Congress tries to avoid anti-competitive behaviour before it leads to any damage and the Section can be applied alongside Section 1 and 2 the Sherman Act. Recent decisions in lower courts have left the traditional view of mainly regarding the market shares of the undertakings in order to state whether the concentration has anti-competitive effects or not. Nowadays it is possible to regard non-market share evidence as proof of a collusion having anti-competitive effects. Oligopolies are not explicitly included under this Section, but is although regarded as one of the legal basis dealing with the matter.²⁴⁸

6.1.2 Conscious parallelism

In the case of oligopolies there is not always proof of meetings, discussions and agreements. There could instead be an implicitly agreed policy among rival undertakings to avoid pricing competition. Hence, it is very attractive for undertakings on an oligopolistic market to collude without explicit meetings and formal agreements, thereby making the need for regulation urgent. The main principle in the U.S. law dealing with oligopolies is the principle of *conscious parallelism*. The principle has been used both to deal with the behaviour of oligopolists acting non-competitively and with the problem of proving illegal collusion where only indirect evidence and not direct evidence of meetings and agreements can be found.²⁴⁹ Conscious parallelism has though never been held to violate the antitrust rules *per se*, but evidence of conscious parallelism can though be used to support a conspiracy finding.²⁵⁰

The earliest cases of conscious parallelism dealt with matters of evidence. One case concerned a retail lumber dealers' trade association, which published a list of wholesalers (who competed with the association) in the retail business²⁵¹ and once the list was published several retail dealers stopped buying from these wholesalers. It was impossible to prove that an explicit agreement existed between the wholesalers, although it was obvious that they were part of an illegal conspiracy excluding the blacklisted wholesalers. The Supreme Court stated

²⁴⁵ Case *National Society of Professional Engineers v U.S.*, 435 U.S. 679, 692 (1978)

²⁴⁶ Scherer, F.M. & Ross David, (1990). p. 317

²⁴⁷ Flint, David, (1979). pp. 65-68

²⁴⁸ Winckler, Antoine & Hansen, Marc, (1993). p. 793

²⁴⁹ Scherer, F.M. & Ross David, (1990). p. 339

²⁵⁰ Flint, David, (1979). p. 66

²⁵¹ Case *Eastern States Retail Lumber Dealers Association v U.S.*, 234 U.S. 600 (1914)

that the general rule under the Sherman Act is that an agreement must be shown in order to prove a combination or conspiracy, but in some cases direct evidence is impossible to get and then it is possible to look at the things actually done instead. In another case concerning a boycott also, but here in the motion picture business, it was impossible to find evidence of an agreement or conspiracy²⁵². The Supreme Court put emphasis on the "singular unanimity of action on the part of the distributors" when they decided the outcome. It could not have been of mere chance that the distributors acted in the same way according to the court. As proof of the illegal conspiracy it was enough that the distributors gave their adherence to the plan and participated in it. The Sherman Act Section was thereby violated. In both cases here mentioned, there was an overt act to which the restriction of trade could be traced, although no express agreement was to be found.

Further development was to be found in the *Tobacco*²⁵³ case some years later. The evidence was entirely circumstantial focusing on pricing parallelism and purchasing behaviour. The Supreme Court considered that evidence enough to find the defendants guilty of violations of the Sherman Act. Some thought it to be a dramatic development, putting tacit, non-aggressive oligopolies under the conspiracy provisions of the Sherman Act. In fact the Court just extended the scope of the Sherman Act, making it possible to find someone guilty on circumstantial evidence only. Perhaps a rule of reason to oligopoly behaviour is to be found implicitly, according to Scherer & Ross. The line where circumstantial evidence warrants an inference of conspiracy is said to be at "parallelism plus"²⁵⁴, "plus" being when the undertakings have advance knowledge of impeding rival actions that could not have been possible to get without covert communications.²⁵⁵ Flint thinks that the case can not be interpreted as establishing a rule where parallel actions by a small number of undertakings with a collectively large market share is *per se* illegal. Parallel actions can though be used as evidence of a collusive agreement regarding pricing policy and exclusionary practices.²⁵⁶

6.2 Merger guidelines

The Department of Justice and the Federal Trade Commission in the U.S. usually issue guidelines regarding merger control. These guidelines quite clearly state the perspective these authorities have regarding in which situations mergers can be seen as negative for competition in oligopolistic markets. In the guidelines of 1992 it was said that mergers are negative when:

"(...) by enabling the firms selling in the relevant market more likely, more successfully, or more completely to engage in coordinated interaction that harms consumers".

Both express and tacit collusion falls under co-ordinated interaction. Examples of factors that might be relevant in the carrying out of a qualitative analysis of merger control are:

- availability to owners of key information concerning market conditions, individual transactions and prices or output of competitors
- the nature of the product (homogeneity or heterogeneity) and the undertakings, including degree of vertical integration and production of complementary products
- changing market conditions
- competition from foreign firms
- pricing or marketing practices

²⁵² Case *Interstate Circuit Inc., et al. v U.S.*, 306 U.S. 208 (1939)

²⁵³ Case *American Tobacco Co. et al. v. U.S.*, 147 F. 2d 93 (1944)

²⁵⁴ Case *Naumkeag Theatres Co. v. New England Theatres, Inc. et al.*, 345 F. 2d 757 (1966)

²⁵⁵ Scherer, F.M. & Ross David, (1990). pp. 341-345

²⁵⁶ Flint, David, (1979). p. 67

- buyer characteristics and the nature of their purchasing process
- characteristics of typical transactions
- possible elimination of competitors with a disruptive effect or potential ("maverick firms")²⁵⁷

To determine market power the U.S. authorities also use an assumption that certain concentration ratios indicate market power. The concentration ratio used is the Herfindahl-Hirschman Index (HHI)²⁵⁸. The HHI focus on the asymmetry in the size distribution of undertakings in the market. To be considered is both the market concentration before the merger and the increase in concentration as a result of the merger.²⁵⁹

7 Oligopolistic dominance under article 2(3) the EC Merger Control Regulation 4064/89

Considering all relevant material, different views on the matter, different interpretations, case law and over all the need of some regulation - is oligopolistic dominance then assignable to article 2(3) the EC Merger Control Regulation? The ECJ has recently come to the solution that this is to be the case. Which interpretation is the right one? Is it possible to give a clear answer at all? With influences from economic theory and U.S. experiences are we then able to get a more realistic answer? Hopefully some question marks are going to be straightened during the analysis. To get at more structured analysis, the analysis will be divided into smaller parts, ending with a summary of the conclusions to be drawn.

7.1 Economic theory

To be able to get a complete picture of competition law, it is almost necessary to include economic theory in the analysis. When examining oligopoly markets it is most definitely necessary, since the discussion tend to be based on economic reasoning, using economic definitions and notions. To exclude the economic part would make the analysis halt. When analysing an oligopoly market the legal practitioners have to use the economic definition of the same. Features copied in legal interpretations are for instance threats to entry on the market, available information, strategic interactions, homogeneity of the product, number of suppliers and purchasers, economics of scale etc. Economic theory is not able in itself to decide whether oligopolistic dominance should be conferred under the EC Merger Control Regulation or not, but is useful as a tool when deciding from a legal point of view. For example game theory has to some extent created a better understanding on the structural characteristics of oligopolistic competitive situations. According to the European Commission it has closed the gap between an "assessment of the potential intensity of competition on the

²⁵⁷ Briones Alonso, Juan F., (1995a). "Oligopolistic Dominance. Is There a Common Approach In Different Jurisdictions?", A review of decisions adopted by the Commission under the Merger Regulation. http://europa.eu.int/search97cgi/s97_cgi...Template=EC_HTML-view.hts&hlnavigate=ALL, downloaded 1998-10-28, p.2 and Winckler, Antoine & Hansen, Marc, (1993). p. 796

²⁵⁸ See page 16 the thesis.

²⁵⁹ Winckler, Antoine & Hansen, Marc, (1993). pp. 794-796

one hand and forecasting its actual intensity among oligopolies on the other”.²⁶⁰ Economic theory is also able to increase our understanding on the grounds on which an oligopoly is based - principally the striving for maximising profit and thereby achieve the monopoly profit.

7.2 Legal theory and characteristics of oligopolistic dominance

With economic theory defining what is to be analysed, the legal analyse is carried through.

7.2.1 Literal and teleological interpretation

What is article 2(3) the EC Merger Control Regulation actually saying? Does it include oligopolistic dominance?

7.2.1.1 Concentration

Legal practitioners are arguing whether the wording "a concentration" is able to include more than one undertaking, since the amount of undertakings is an important requirement for oligopolies. Concentration thereby being one of the most controversial issues under a literal interpretation. According to my opinion an oligopoly is not likely to fall under article 3 the EC Merger Control Regulation, establishing what is to be considered a concentration. It would widen the scope of the article in a way not likely to be coherent with its literal wording. The article does not mention co-operation or collusion among several undertakings able to establish a concentration. Instead it refers to one or more undertakings loosing its independence when creating a concentration. In an oligopoly none of the undertakings aim at reducing their independence when co-operating. An oligopoly is not an economic entity in that meaning, but several independent entities and thereby references to the wider definition of "one or more undertaking" under article 86 could be appropriate. If not a concentration under article 3, oligopolies are most likely not concentrations under article 2(3) either. Article 3, although left with a rather broad definition to be able embrace all forms of concentrations, still emphasises the exercise of control to be a decisive notion for a concentration to be established. In an oligopoly it is possible for some undertakings to have more power than the others and thereby the ability to exercise some kind of control, but this is most likely not what is meant by control according to the Regulation. Comparing article 2(3) the Regulation with article 86 the Treaty of Rome, also indicates oligopoly not to be included under article 2(3). Article 86 clearly states that "one or more undertaking" is to be included under the article, when article 2(3) only refers to "a concentration". A concentration though consisting of one or more previously independent undertakings, now creating a single entity. Maybe one should see to the situation before the merger and thereby include under the notion independent undertakings likely to create a concentration? Then an oligopoly could be the first stage towards the creation of a concentration and as such able to impede competition if creating or strengthening a dominant position. The arguments against this interpretation lies in the wording of the article, where it is the concentration which impedes competition and not the economic entities creating the concentration. In conclusion, under a literal interpretation

²⁶⁰ European Commission, (1995). p. 79.

oligopolies are not likely to fall under the scope of article 2(3) the EC Merger Control Regulation.

7.2.1.2 Dominance

Another problem relates to whether a concentration defined under article 3 is able to fall under article 2(3) if it results in a collective dominant position? Does only sole dominance fall under article 2(3)? Cook & Kerse state that it is questionable whether the concept of joint dominance can be developed in the context of article 2, when dealing with an oligopolistic situation, where none of the undertakings which are colluding is able to achieve a dominant position by itself.²⁶¹ Neven et al. do not take a clear stand, whether or not collusion is able to create a dominant position under the article, but just states that the EC Merger Regulation neither explicitly allows for, nor rules out the possibility of collusion as a source of dominant position.²⁶² Some arguments are though possible to put forward, with an aim of proving that both sole and joint dominance are to be included under the article. It is when examining the wording of the preamble to the Merger Regulation and the likely intentions of the Council that joint dominance might be a part of the article.

The preamble of the EC Merger Control Regulation states:

- (1) *Whereas, for the achievement of the aims of the Treaty establishing the European Economic Community, Article 3(f)²⁶³ gives the Community the objective of instituting "a system ensuring that competition in the common market is not distorted";*
- (6) *Whereas Articles 85 and 86, while applicable, according to the case-law of the Court of Justice, to certain concentrations, are not, however, sufficient to control all operations which may prove to be incompatible with the system of undistorted competition envisaged in the Treaty;*
- (7) *Whereas a new legal instrument should therefore be created in the form of a Regulation to permit effective control of all concentrations from the point of view of their effect on the structure of competition in the Community and to be the only instrument applicable to such concentrations;*
- (8) *Whereas this Regulation should therefore be based not only on Article 87 but, principally, on Article 235 of the Treaty, under which the Community may give itself the additional powers of actions necessary for the attainment of its objectives, including with regard to concentrations on the market for agricultural products listed in Annex II to the Treaty;*

When studying these wordings the aim of the Regulation seems to be to fill gaps left in the powers of the Commission according to article 3(g), regarding a system ensuring that competition in the internal market is not distorted. Some regulation is clearly needed in the oligopoly area and if article 85 and 86 are insufficient the Regulation should be applied to prevent the likely creation of an oligopolistic dominant situation.

If instead looking at the possible intentions of the Council when working with the EC Merger Control Regulation, the fact that oligopolistic dominance is not explicitly mentioned, does not mean that it is to be excluded from the Regulation. Case law under, especially, article 86 is likely to have influenced and also the systems of merger control in other countries where oligopolistic dominance is covered by merger laws. The wording of dominance does not solely refer to sole dominance, nor joint dominance, since neither of these words are included before "dominance" in the article. Thereby, it should not be possible to exclude either of the interpretations, but both sole and joint dominance are possible to be included under the article. The aim and the spirit of the Regulation has to be considered.

In sum, oligopolistic dominance should thereby be able to be included under article 2(3) when doing a literal interpretation. This is the stand that the ECJ has taken recently in the case of Kali+Salz. In para 166 the ECJ concludes that article 2 "does not in itself exclude the

²⁶¹ See Cook, John and Kerse, Chris, (1991). *EEC Merger Control*. p. 80.

²⁶² Neven, Damien et al., (1993). p. 106.

²⁶³ Today article 3(g).

possibility of applying the Regulation to cases where concentrations lead to the creation or strengthening of a collective dominant position, that is, a dominant position held by the parties to the concentration together with an entity not a party thereto". Meaning that article 2(3) does not only refer to concentrations which create or strengthen an *individual* dominant position. In para 178 the ECJ further states that "it follows from the foregoing that collective dominant positions do not fall outside the scope of the Regulation". It is thereby possible for an oligopoly to collectively impede competition, although some entities are not parties to the concentration. Not everybody is though convinced that this is the right literal interpretation. It has also been suggested that the Merger Regulation lacks even the meagre textual justification to be found in article 86 (referring to one or *more* undertakings) to be able to regard oligopolistic dominant positions to fall under the Regulation.²⁶⁴ The Advocate-General Giuseppe Tesouro stated in the case of Kali+Salz that the Commission should not have the power under the Merger Regulation to consider the issue of oligopolistic dominance when deciding in notified merger cases. Further on, he thought that the Merger Regulation article 2 does not contain any references to the concept of oligopolistic dominance, when compared to article 86 and put in relation to the context of the whole Regulation. He accepted that oligopolies might have the same negative effects as monopolies, but this does not justify the application of the Merger Regulation to oligopolistic dominant positions.²⁶⁵

7.2.2 Interpretation of case-law

When studying relevant case law, characteristics likely to establish an oligopolistic dominant position are sorted out. Today we therefore have a more profound basis when deciding whether a concentration consisting of oligopoly members, is impeding competition or not. The first clear statements from the Commission came in the case of Nestlé/Perrier, which lead many legal practitioners to conclude that oligopolistic dominance now was able to fall under the Merger Regulation²⁶⁶. The Commission, with this case, began to view economic factors more relevant for the analysis of impediment of dominant positions and also left the traditional dominance analysis in favour of an oligopoly analysis when making certain statements. This is clearly visible in the language used and the character of examination; including investigation of elasticities, price sensitivity, character of demand, cost structures etc. Worth mentioning is that none of the characteristics mentioned in Nestlé/Perrier and in chapter 5 above, are able to alone create an oligopolistic dominant position, but only when taken together to be evidence of such a position. This is also stated in the case of Kali+Salz, where the Commission and the ECJ did not agree on the status of the factors likely to create oligopolistic dominance. The ECJ here almost ruled out all arguments put forward by the Commission. The ECJ, in para 226, states that high market shares can not in itself point conclusively to the existence of an oligopolistic dominant position. The alleged structural links, severely relied upon by the Commission, were not supported by enough evidence according to the ECJ and could not be considered to be as tight and conclusive as the

²⁶⁴ Editorial, (1998). "Collective dominance: trump card or joker?", 23 *E.L.Rev. June*, pp. 199-200.

²⁶⁵ "Kali & Salz - Collective Dominance Under the merger Regulation Questioned", EU & Competition Law Newsletter, September 1998. http://www.lovellwhitedurrant.com/NewSite/PUBS/EU_MON/Sep1997/26082_12.HTM, downloaded 1998-09-05.

²⁶⁶ See for instance Bulmer, Simon, (1994). p. 440, Rodger, Barry J., (1994). p. 22, Lowe, P., (1994). p. 149 and Briones Alonso, Juan F., (1993). "Economic assessment of oligopolies under the Community Merger Control Regulation", 4 *ECLR*. http://europa.eu.int/search97cgi/s97_cgi...Template=EC_HTML-view.hts&hlnavigate=ALL, downloaded 1998-10-28. Briones considers it clearly stated that Community control now cover oligopolistic dominant positions.

Commission tried to argue. It is not sufficient to rely on a twenty year old declaration of incompatibility under article 85, when deciding on absence of competition. It is considerable important to show that there is no effective competitive counterweight to the oligopoly, for an oligopolistic dominant position to be at stake (para 248). The case of Kali+Salz thereby both makes it easier to fight oligopolistic dominant positions and anti-competitive behaviour when including the concept under investigation under article 2(3) the EC Merger Control Regulation, but at the same time makes it harder for the Commission to prove the same behaviour. The result, according to my opinion, still being an, to some extent, unclear conception of justice. The burden of proof seems to have become heavier. Several characteristics of an oligopoly market have to be taken under consideration and an economic evaluation carried through, clearly no easy task.

Whether a certain characteristic is especially important for the evaluation is difficult to find evidence of in the cases. Market shares tend to be the first thing to be considered by the Commission, but is still not able to prove impediment of competition by itself. Barriers to entry, remaining competitors and market transparency are as important as the notion of market shares. Structural links, which were thought of becoming more important, are probably not so important after the decision in Kali+Salz, but should not be forgotten, after all being an indication of co-operation to come and likely reduction of transparency on the market. The economic evaluation of elasticities of demand, being an important tool when evaluating a market in economics and clearly one of the most likely characteristics the individual undertaking considers when entering into an oligopoly co-operation, is to get more important in competition law as well. If considered by the undertakings, it should be considered by the legal practitioners as well or otherwise the undertakings will get a lead over the competition authorities and this is likely to have negative effects on competition in the internal market of the European Union. A characteristic not being that important, from my point of view, are different cost structures. It is rather difficult to prove similar costs and co-operation from the parties is necessary to a large extent when examining this fact. If undertakings are colluding, successfully, you could almost presume similar cost structures since it otherwise is difficult to maximise profit jointly and decide common output levels. Capacity, stability of market environment, vertical integration and past pricing patterns are characteristics with similar degree of importance, i.e. they are able to influence the decision of the Commission but without some of the "traditional" and more cumbersome characteristics not likely to indicate an oligopolistic dominant situation. A symmetric market structure is without doubt more likely to include oligopolistic behaviour. The power of purchasers and past pricing patterns are characteristics quite easy to prove and should as far as possible be used against the oligopoly members when suspecting anti-competitive collusive behaviour.

To conclude, some characteristics evaluated in the case-law of the Commission and the ECJ are to be taken more seriously than others and the economic evaluation should be even more highlighted since the appropriate tools for examining oligopolistic markets are economic. Competition law in general is not able to deal with these kind of questions without consulting economic theories and experiences.

7.3 Experiences from the U.S.

When comparing the Sherman Act Section 1 and 2 literally with article 85 and 86 the Treaty of Rome, they seem to have the same underlying basis when emphasising the importance of no restrictions on trade in their respective markets. It though seems like differences might exist politically and socially, in particular the stress on market integration. For example it

could be mentioned that Community enforcement in competition law is easier, when entrusted to the single body of the Commission, than the model of private litigants in the U.S. This discussion is though not going to be taken any further here. Similarities also exist when comparing case-law. The ECJ rulings on concerted practices under article 85 roughly corresponds to the case-law related to collusion in the U.S. Article 85, as Section 1 the Sherman Act, also tends to be used in more overt cartel-type situations. American influences can be seen in the Merger Regulation for example in the different analysis that is made of oligopolistic dominance in the merger field, using the wording of anti-competitive parallel behaviour instead of tacit collusion (see the case of Nestlé/Perrier). Also the economic evaluation, today more emphasised by the Commission, bears influences from the U.S.

The Merger Guidelines developed in the U.S. more clearly focus on preventing mergers that will impede effective competition on the market in question, where several undertakings are acting collectively. The degree of concentration is only the starting point when investigating an oligopolistic market, the analysis is instead to a large extent very "fact-intensive". Instead of focus on whether a concentration creates or strengthens single-firm market power as for long has been the method of the Commission in their analysis, the U.S. authorities concentrate their effort on investigating the likeliness of co-ordinated market power. Co-ordinated interaction is the principal enforcement concern in the U.S.

However, the similarities prevail when comparing the law of the U.S. and the EC merger law. The same relevant factors are considered and the underlying aim is rather alike. The Community will probably even move closer to the jurisprudence of the U.S., as is to be seen in the development so far. Co-ordinated practices are to get more attention also in the EU.

7.4 Summary

To sum up I find it unrealistic when doing a literal interpretation to confer oligopolies under the notion of concentration and thereby they should not be able to fall under article 2(3) the EC Merger Control Regulation either. If instead looking at the notion of dominance it should not be excluded to confer both single and joint dominance under article 2(3) the Regulation. Both a literal interpretation and case law suggests this is to be the case and the recent stand of the ECJ is likely to be the future guidelines in cases of oligopolistic dominance. Characteristics able to establish an oligopolistic dominant position are many and have different weight in the evaluation, some being more important than others. Once more emphasised - economic evaluation should be more highlighted since the appropriate tools for examining oligopolistic markets are economic. Finally the EC law could learn some from the U.S. merger guidelines, although already inspired to a large extent.

8 Concluding remarks

The examination is carried through and the analysis made. Our knowledge about oligopoly markets and oligopolistic dominance should now have been enhanced and clarifications been made concerning the problem whether or not oligopolistic dominance is able to be included under article 2(3) the EC Control Merger Regulation. Is it then possible to say that we have a clear conception of justice concerning the question of oligopolistic dominance? Both yes and no I would argue. First of all a concentration is not to be forbidden simply because the market is oligopolistic if *not* creating or strengthening a dominant position. Mergers should still be able to be carried through on these markets. It is only when an oligopoly is merging with another entity and through the merger impede competition in the market due to its dominant position that article 2(3) the EC Merger Control Regulation is applicable. An oligopolistic dominant position is thereby created. Oligopolistic since it is merging on an oligopoly market that is carried through and dominant since harming competition. Whether or not oligopolies as such are to be considered a concentration and thereby fall under the article under examination, is rather unclear and as mentioned earlier not likely to do so when interpreting the article literally. This is though a minor problem since the creation or strengthening of a jointly achieved dominant position still seems able to be conferred under article 2(3). The standpoint taken by the ECJ is convincing and their arguments make sense - rejecting their findings would leave us without the necessary tools to fight this undesirable market imperfection. It could clearly not be in the best interest of the Community to leave oligopolistic dominance without some kind of regulation. Or could it? As mentioned, a minority of legal practitioners consider the efficiency issue a factor making oligopolistic dominance lawful. If enhancing efficiency in the industry with positive effects for the internal market as such, perhaps this is something to take under consideration before ruling these collusions out. At the same time this would threaten the whole common market project, leaving the aim of a perfect competitive market. Pros and cons surely exist. The characteristics examined when deciding whether the collusive behaviour of a group of undertakings is impeding competition, are not likely to increase. They are already numerous and it is more likely that the characteristics existing develop further instead, with influences from the U.S. merger guidelines and economic theory. The close links to economics and economic theory are not possible to reject and should be considered even more. Economic theory has the tools necessary for the legal practitioners to know and use, if wanting to keep control of the Community market.

Finally, I would like to add that the, to some extent, unclear conception of justice could perhaps be reduced if amending article 2(3) the EC Merger Control Regulation. It is not preferable to have a neutral formulation like the one today, if the result is not knowing the status of the article. "A concentration" could be replaced by the wording in article 86 the Treaty of Rome, i.e. "one or more undertaking" and to "dominance", "sole or joint" could be added. This would reduce some of the uncertainties surrounding the article.

I hope to have increased some knowledge with my thesis, since this was one of the underlying aims. I also hope that the reading has been interesting and convinced you of the importance of widening the field of competition law when doing an examination like this. Economics is useful and political science is not to forget either. Other fields of studies are able to fill the gaps not able to be filled by law.

Bibliography

LITERATURE

- Begg, P.F.C. *Corporate Acquisitions & Mergers*. 3rd ed. London/Dordrecht/Boston: Graham & Trotman, 1991.
- Commission of the European Communities *XXIst Report on Competition Policy*. Brussels/Luxembourg: OOPEC, 1992.
- Cook, John and Kerse, Chris *EEC Merger Control*. London: Sweet & Maxwell, 1991.
- Cooke, Terence E. *Mergers & Acquisitions*. Oxford: Basil Blackwell, 1986.
- Craig, Paul and de Búrca, Gráinne *EC law*. Oxford: Clarendon Press, 1997.
- European Commission *New Industrial Economics and Experiences from European Merger Control - New Lessons about Collective Dominance?* Brussels/Luxembourg: OOPEC, 1995.
- Frazer, Tim *Monopoly, Competition and the Law*, 2nd ed. London: Harvester Wheatsheaf, 1992.
- Friedman, James *Oligopoly theory*. Cambridge/New York /Melbourne: Cambridge University Press, 1983.
- Gundersen, Frank Fritjof *Kontrollen med karteller og storbedrifter*. Oslo/Bergen/Tromsø: Universitetsforlaget, 1972.
- Hawk, Barry E. and Huser, Henry L. *European Community Merger Control: A Practitioners Guide*. The Hague: Kluwer Law International Publishers, 1996.
- Jacquemin, Alexis "Concentration and Mergers in the E.E.C.: Towards a system of Control". In: Hopt, Klaus J., (ed.) *European Merger Control*. Berlin/New York: Walter de Gruyter, 1982.
- Jones, Christopher & González-Díaz, Enrique (ed. by Overbury, Colin) *The EEC Merger Regulation*. London: Sweet & Maxwell, 1992.
- Martin, Stephen *Industrial economics*. New York: Macmillan Publishing Company, 1988.
- Neven, Damien et al. *Merger in Daylight*. London: CEPR, 1993.
Parkin, Michael et al. *Economics*. Harlow: Addison Wesley, 1997.

Scherer, F.M. & Ross David
Industrial Market Structure and Economic Performance, 3rd ed. Boston: Houghton Mifflin Company, 1990.

PERIODICALS

- Briones Alonso, Juan F. "Oligopolistic Dominance in Different Jurisdictions", 6 *ECLR*. Oxford: Sweet & Maxwell Ltd., 1995(b).
- Bulmer, Simon "Institutions and Policy Change in the European Communities: the Case of Merger Control", *Public Administration*, vol. 72 autumn. Oxford/Cambridge: Blackwell Publishers, 1994.
- Editorial "Collective dominance: trump card or joker?", 23 *E.L.Rev. June*. London: Sweet & Maxwell, 1998.
- Flint, David "Abuse of a Collective Dominant Position", *LIEI* 1978/2. Deventer: Uitgeverij Kluwer B.V., 1979.
- Fox, Eleanor M. "Merger Control in the EEC - Towards a European Merger Jurisprudence", *Fordham Corp. L. Inst.* 709. Deventer: Kluwer Law & Taxation Publisher, 1991.
- Hansen, Marc, et al. "Oligopolistisk dominans efter EF fusionsforordningen", *SvJT*, häfte 5/6, Uppsala: Iustus Förlag Aktiebolag, 1994.
- Jenny, Frédéric "EEC Merger Control: Economies as an Antitrust Defense or an Antitrust Attack?", *Fordham Corp. L. Inst.* 591. The Hague: Kluwer Law International, 1992.
- Lowe, P "Recent Developments In EC Merger Control", *Fordham Corp. L. Inst.* 149. The Hague: Kluwer Law International, 1994.
- Ridyard, Derek "Economic Analysis of Single Firm and Oligopolistic Dominance under the European Merger Regulation", 5 *ECLR*. Oxford: Sweet & Maxwell Ltd., 1994.
- Rodger, Barry J. "Market Integration and the Development of European Competition Policy to Meet New Demands: A Study of the Control of Oligopolistic Markets and the Concept of a Collective Dominant Position Under Article 86 of the EC Treaty", *LIEI* 1994/2. Deventer: Kluwer Law and

Taxation Publishers, 1994.

- Rodger, Barry J. "Oligopolistic Market Failure: Collective Dominance versus Complex Monopoly", 1 *ECLR*. Oxford: Sweet & Maxwell, 1995.
- Shaw, Josephine "Collective Dominance or Concerted Practices?", 14 *E.L. Rev.* London: Sweet & Maxwell, 1989.
- Soames, Trevor "An Analysis of the Principles of Concerted Practice and Collective Dominance: A Distinction without a Difference?", 1 *ECLR*. Oxford: Sweet & Maxwell, 1996.
- Stenbacka, Rune "Modern oligopolteori och konkurrensolitik", *EST*, no. 4, ser. 3. Helsingfors, 1991.
- Winkler, Antoine & Hansen, Mark "Collective Dominance under the EC Merger Control Regulation", 30 *CMLRev.* Leiden: Kluwer Academic Publishers, 1993.

ELECTRONIC RESOURCES

- Briones Alonso, Juan F. "Economic assessment of oligopolies under the Community Merger Control Regulation", 4 *ECLR*. London: Sweet & Maxwell Publications, 1993. http://europa.eu.int/search97cgi/s97_cgi...Template=EC_HTML-view.hts&hlnavigate=ALL, downloaded 1998-10-28.
- Briones Alonso, Juan F. "Oligopolistic Dominance. Is There a Common Approach In Different Jurisdictions?", A review of decisions adopted by the Commission under the Merger Regulation. Brussels: European Study Conference, 1995(a). http://europa.eu.int/search97cgi/s97_cgi...Template=EC_HTML-view.hts&hlnavigate=ALL, downloaded 1998-10-28.
- EU & Competition Law Newsletter "Kali & Salz - Collective Dominance Under the merger Regulation Questioned", September 1998. http://www.lovellwhitedurrant.com/NewSite/PUBS/EU_MON/Sep1997/26082_12.HTM, downloaded 1998-09-05.

OFFICIAL DOCUMENTS

Council Regulation (EEC) No 4064/89 of 21

European Union

December 1989 on the control of concentrations between undertakings, OJ 1989 L 395/1 (Dec. 30, 1990). Corrigendum: OJ L 257 (Sept. 9, 1990)

Commission notice on the definition of the relevant market for the purposes of Community competition law, OJ C 372/5 (Dec. 9, 1997).

USA

Sherman Act of 1890

Clayton Act of 1914

Case law

Judgements from the European Court of Justice

Ahmed Saeed	Case 66/86 [1989] ECR 803
Flugreisen v Zentrale zur Bekämpfung Unlauteren Wettwerbs	
Almelo	Case C-393/92 [1994] ECR I-1477
Continental Can Co Inc v Commission	Case 6/72 [1973] ECR 215, CMLR [1973] 199
Hoffmann-La Roche v Commission	Case 85/76 [1979] ECR 461, CMLR 3 [1979] 211
ICI v Commission	Case 48/69 [1972] ECR 619, CMLR [1972] 557
Kali+Salz	C-68/94 & C-30/95 (March 31, 1998)
Suiker Unie v Commission	Case 40/73 [1975] ECR 1663
United Brands v Commission	Case 27/76 [1978] ECR 207
Woodpulp	Cases 89, 104, 114, 116, 117, 125-129/85 [1988] ECR 5193
Zuchner v Bayerische Veriensbank	Case 172/80 [1981] ECR 2021

Judgement from the European Court of First Instance

Gencor v Commission of the European Communities	Case T-102/96 (March 25, 1999).
Tetra Pak Rausing v Commission	Case T-51/89 [1990] ECR II 347

Decisions from the Commission of the European Union

Aérospatiale-Alenia/de Havilland	No. IV/M.053 (Oct. 2, 1991), OJ L 334/42 (Dec. 5, 1991), CMLR 4 [1992] M2
AKZO/Nobel Industrier	No. IV/M.390 (Jan. 10, 1994), OJ C 19/13 (Jan. 22, 1994)
Alcatel/AEG Kabel	No. IV/M.165 (Dec. 18, 1991), OJ C 6/23 (Jan. 10, 1992)
American Cyanamid/Shell	No. IV/M.354 (Oct. 1, 1993).
British Airways/TAT	No. IV/M.259 (Nov. 27, 1992).
CCIE/GTE	No. IV/M.258 (Sept. 25 1992)
Cartonboard	OJ [1994] L 243/1
Digital/Kienzle	No. IV/M.57, OJ C 56/16 (1991), CMLR 4 [1992] M99
ELF Atochem/Rütgers	No. IV/M.442 (July 29, 1994)
	No. IV/26.918 (Jan. 2, 1973), OJ L 140/17 (May 26, 1973)

European Sugar Industry	No. IV/M.460 (July 6, 1994), OJ C 211/5 (Aug. 2, 1994).
Holdercrim/Cedest	No. IV/31.406 (Dec. 21, 1988), OJ L 33/44 (Dec. 4, 1989), CMLR 4
Italian Flat Glass	[1990] 535
Kali+Salz/MdK/ Treuhand,	No. IV/M.308 (Dec. 14, 1993), OJ L 186/38 (July 21, 1994)
Knorr-Bremse/Allied Signal	No. IV/M.377 (Oct. 15, 1993), OJ C 298/6 (Nov. 4, 1993)
Magill TV Guide	No. IV/31.851(Dec. 21, 1988), OJ L 78/43 (March 21, 1989)
Mannesmann/Vallourec/ Ilva (DMV)	No. IV/M.315 (Jan. 31, 1994), OJ L 102/15 (April 21, 1994)
Nestlé/Perrier	No. IV/M.190 (July 22, 1992), OJ L 356/1 (Dec. 5, 1992), CMLR 4 [1993] M17
Pilkington-Techint/SIV	No. IV/M.358 (Dec. 21, 1993), OJ L 158/24 (June 25, 1994).
Price Waterhouse/ Coopers & Lybrand	No. IV/M.1016 (May 20, 1988), OJ L 50/27 (Feb. 26, 1999)
Promodes/Dirsa	OJ [1990] C 321/16, CMLR 4 [1991] 8.
Renault/Volvo	OJ [1990] C 281/2, CMLR 4 [1991] 297
Rhône-Poulenc/SNIA (II)	No. IV/M.355 (Sept. 8, 1993), OJ C2 72/6 (Oct. 8, 1993)
Rhône-Poulenc- SNIA/Nordfaser	No. IV/M.399 (Feb. 3, 1994), OJ C 42/13 (Feb. 12, 1994)
SNECMA/TI	No. IV/M.368 (Jan. 17, 1994), OJ C 42/12 (Feb. 12, 1994)
TetraPak/Alfa-Laval	No. IV/M.068 (July 19, 1991), OJ L 290/35 (Oct. 22, 1991)
Thorn EMI/Virgin Music	No. IV/M.202 (April 27, 1992), OJ C 120/30 (May 12, 1992)
Unilever France/Ortiz- Miko (II)	No. IV/M.422 (March 15, 1994), OJ C 109/5 (April 19, 1994)
Varta/Bosch	No. IV/M.012 (July 31, 1991), OJ L 320/26 (Nov. 22, 1991)
Voith/Sulzer (II)	No. IV/M.478 (July 29, 1994), OJ C 225/13 (Aug. 13 1994)

Judgements from the U.S. Supreme Court

American Tobacco Co. et al. v. U.S.	147 F. 2d 93 (1944)
Eastern States Retail Lumbers Dealers Association v U.S.	234 U.S. 600 (1914)
Interstate Circuit Inc., et al. v U.S.	306 U.S. 208 (1939)
National Society of Professional Engineers v U.S.	435 U.S. 679, 692 (1978)
Naumkeag Theatres Co. v. New England Theatres, Inc. et al.	345 F. 2d 757 (1966)