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Collective Dominance in E.C. Merger Control: An Analysis of Legal and Economic Arguments

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CONTENTS

Abstract

This essay analyses how the concept of collective dominance is applied in the case-law of E.C. merger control. The method used in the analysis is to investigate the legal arguments that are applied in the assessment of collective dominance and to discuss how they can be understood in the economic context of every case at issue. Thus, the starting platform in the analysis is a legal one.

The economic theories taken up in this essay are intended to provide a common understanding of the economics behind the legal concept of collective dominance. The theories are considered as a whole, even though a structural and a behavioural (game-theoretical) approach is distinguished.

An important conclusion drawn from the analysis in the essay is that an understanding of the relation between law and economics is essential for the collective dominance appraisal. In this relation law takes precedence over economics, but as a paradox, like it may appear, a high legal standard in merger control is directly connected to a high economic standard.

List of Abbreviations

CFI	Court of First Instance
CMLRev.	Common Market Law Review
E.C.	European Communities (until 1992: European Economic Communities).
ECLR	European Competition Law Review
ECR	European Court Reports
E.C. Treaty	The E.C. Treaty is also named 'the Treaty of Rome'.
ECJ	European Court of Justice
E.U.	European Union
OJ	Official Journal

Table of Cases

Before the Court of Justice

C-68/94 and C-30/95 *France v. Commission* [1998] ECR I-1375.

Before the Court of First Instance

Case T-102/96 *Gencor v. Commission* [1999].

Before the Commission

M. 190 *Nestlé/Perrier* [1992] OJ C 53.

M. 214 *DuPont/ICI* [1993] OJ L 7/13.

M. 308 *Kali und Salz* [1993] OJ C 196.

M. 368 *SNECMA/TI* [1993] OJ C 42.

M. 580 *ABB/Daimler Benz* [1995] OJ L 11/1.

M. 619 *Gencor/Lonrho* [1996] OJ C 314.

M. 726 *Bosch/Allied Signal* [1996].

M. 1016 *Price Waterhouse/Coopers & Lybrand* [1999] OJ L50/27.

M. 1524 *Air Tours/First Choice* [1999] OJ C 124.

M 1663 *Alcan/Alusuisse* [2000] OJ C 274.

M 1673 *Veba/Viag* [2000] OJ C 371.

M 1715 *Alcan/Pechiney* [1999] OJ C 274.

M 1882 *Pirelli/BICC* [2000].

M 1939 *Rexam/American National Can* [2000].

M 2180 *Outokumpu/Avesta Sheffield* [2000] OJ C 324.

1 Introduction

An increasing number of mergers assessed by the European Commission raise the question whether a collective dominant position is likely to be established by the firms involved in the merger together with other market players.[1]

The concept of collective dominance has been established by the Commission in the *Nestlé/Perrier* decision nine years ago. However, the scope and the application of the concept of collective dominance is far from clear today, at the same time as the concept becomes more and more significant due to the growing number of cases where collective dominance considerations are necessary.

Even though there are legal provisions providing a 'checklist' of criteria which have to be taken into account by the Commission in its merger appraisal, these criteria do not by themselves provide a sufficient basis on which mergers raising the problem of collective dominance can be judged. The competition commissioner, Mario Monti, gave the following statement last September (2000).

> "We do not have an analytical strait-jacket that will mechanistically determine the outcome of future cases where oligopoly issues arise. We will continue to refine our analysis in this area on a case-by-case basis […]"[2]

Hence, the Commission's position today is that collective dominance cannot formally be established by the fulfilment of certain criteria, but it has to be taken into the economic context. Moreover, the Commission has adopted a case-by-case approach on this issue. These aspects make it necessary to analyse recent decisions and judgements in order to find out where the "refinement" of the concept of collective dominance is leading to and how the criteria set out in the Merger Regulation are applied, especially how they could be understood in an economic context.

1.1 Purpose

This essay aims to analyse the current practice in E.C. merger control regarding the concept of collective dominance. The analysis has the objective to give an understanding about how issues concerning collective dominance are tackled in E.C. merger control and to discuss how future merger cases could be decided.

The overarching aim is to provide a *guideline* for practitioners, however going into details of economic and judicial argumentation. Consequently, the main purpose of this essay is *not* to discuss how legal rules should look like *but* to analyse what the legal rules are and how they are applied, especially in relation to their economic nature and to the economic situation of each individual case.

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[1] Competition Report 2000, p. 62.
[2] Monti, Mario, 'The main challenges for a new decade of EC Merger Control' at: EC Merger Control 10th Anniversary Conference, Brussels, 14-15 September 2000.

Following four issues will be dealt in detail:

1. What is the relevant question representing the concept of collective dominance in each case?
2. How are the criteria from the "checklist" applied?
3. How does the Commission make use of its discretion implicit in the provisions of an economic nature? Does the Commission's reasoning make sense economically?
4. How is legal certainty balanced against economic flexibility? Is increased legal certainty possible?

1.2 Method

The method used in the analysis is to investigate the legal arguments that are applied in the assessment of collective dominance and how they can be understood in the economic context of every case at issue. The starting platform in the analysis is a legal one. Thus the argumentation and the definitions in the case-law are primarily examined as to their general consistency with common sense in economics and not as to their coincidence with specific economic concepts.

Nevertheless, I will describe a number of economic theories in chapter 4, since what constitutes common sense in economics can only be comprehended against the background of the development of different economic theories on competition and in particular on oligopolistic markets. Of course, most of the theories have serious deficiencies and many of them may be obsolete regarding the newest developments in the society influencing the markets, such as the service and intellectual capital society or e-business. Regarding to that problem, Van den Bergh has argued in 1996 that,

> "outdated economics has survived in the form of modern legal thinking. Current European competition law still has many factors which remind one of industrial economics of the 1950s and 1960s. […] A competition policy for the 1990s cannot rely on the economic learning of the 1960s"[3]

In chapter 5, we will see to what extent Van den Bergh's statement actually can be observed.

The cases I have chosen to analyse are a few of the many cases the Commission has dealt with the concept of collective dominance. The cases from *Nestlé/Perrier* to *Air Tours/First Choice* contribute important essentials to the concept of collective dominance. In my view, they are all benchmarks in the development of this concept, even though they obviously do not always unanimously run in the same direction. The following cases are selected as models, aiming to show the development of the concept of collective dominance in the case-law after the controversial *Air Tours/First Choice* case. In these cases I will restrict the analysis to a main problem in the application of the concept of collective dominance, namely the issue whether the Commission has adopted the game-theoretical approach on a regular basis apart from the structural approach. Due

[3] Van den Bergh, Roger, 'Modern Industrial Organisation versus Old-fashioned European Competition Law' in: *ECLR [1996]*, pp. 75-87.

to this restriction, I will concentrate on the cases from *Nestlé/Perrier* to *Air Tours/First Choice* in the commentary of the case-law in chapter 6.

1.3 Delimitation

Since the issue of collective dominance comprises and touches on a lot of other issues, various delimitations need to be made in order to be able to appropriately deal with the main features pointed out in chapter 1.1.

Firstly, only those applications of the concept of collective dominance under the Merger Regulation will be dealt in this essay. In contrast to Articles 81 and 82 of the E.C. Treaty, the Merger Regulation refers to the prospective assessment of the collective dominance problem and that is why a clear borderline has to be drawn between these different applications. The prospective assessment whether collective dominance will arise in the post-merger market is naturally more complicated than to evaluate collective dominance on facts that already exist.

Secondly, although the definition of the relevant market is an essential part of merger control and naturally of the assessment of collective dominance as well, it needs to be left outside the scope of this essay. In this essay I will concentrate on the notion of 'dominance'. The issue of the relevant market is so extensive that it should be dealt in a separate essay. In addition to this matter, it is appropriate to mention that I will only concentrate on substantive law, in particular Article 2 of the Merger Regulation.

Thirdly, it would be outside the scope of this essay to take up all the possible countervailing benefits. I have chosen to concentrate on efficiency considerations, being the most interesting ones with respect to the case-law analysed in this essay. Thus, the failing firms defence, social considerations and technical and economic progress fall outside the scope.

Finally, as stated in the title of this essay, the arguments taken into account are judicial and economic. Of course, there are other objectives in competition law beyond economic and judicial ones, but I have chosen not to consider them in this issue, since they very seldom can be decisive in a case if at all.

1.4 Disposition

The structure in this essay follows the fact, which already has been mentioned above, that the legal arguments are the starting point. Thus, after a general definition of collective dominance, the Merger Regulation will be described in chapter 3, since it provides the legal basis for the assessment of collective dominance. In the following 4th chapter, the economic background will be explained in order to understand the economic arguments regarding the collective dominance problem. In the chapters thereafter, chapters 5 and 6, the 'tools' developed in chapters 3 and 4 will be applied, first on the analysis of the case-law, then on the interpretation and discussion of certain main features from the analysis.

2 Definition of Collective Dominance

The concept of collective dominance is a legal concept which is based on the economic proposition that in highly concentrated markets it is likely that the small number of firms surviving will recognise their interdependence and the futility of aggressive competitive behaviour.[4]

Although based on an economic proposition, there is no concept of collective dominance in economics, that means, the legal concept has no direct equivalent in economics. What comes near to the legal concept are the economic concept of oligopolies and the concept of coordinated effects. [5] Consequently legal and economic perspectives do not always coincide: for example, whereas the relevant question in the legal concept is whether economic facts will make tacit collusion likely in the post-merger market[6], the economic concepts focuses on the analysis of oligopolistic behaviour which includes a rich variety of behaviour patterns, not merely that of tacit collusion.[7]

The economic concepts of oligopoly and coordinated effects as well as their applicability to the collective dominance concept will be described below in chapter four. As it will be explicated further in this essay, it should be made clear from the beginning that ‘oligopoly’ does *not* mean collective dominance and is *not* a problem in itself.

As important as to distinguish ‘oligopoly’ from ‘collective dominance’ it is to sort out ‘unilateral effects’ from the concept of collective dominance. ‘Unilateral effects’ have nothing to do with *collective* dominance since they regard the *unilateral* price increase resulting from a merger. However, this does not mean that there necessarily is a single firm dominance where an unilateral price increase takes place. In contrast, the price increase through collusion arising from a merger corresponds to the concept of collective dominance.[8]

Finally it is useful mentioning the synonyms that are used in the concept of collective dominance. In the case-law the term of oligopolistic dominance often can be found at the place of collective dominance.[9] Joint dominance is another synonym frequently used in literature.

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[4] Cook, C.J./Kerse, C.S. (2000) *E.C. merger control*, 3 rd edition, p. 171.
[5] Motta, Massimo, ‘E.C. Merger Policy and the Airtours Case’ in: *ECLR [2000]*, p. 203.
[6] Monti, Mario, as note 2 above.
[7] Baumol, William J./Blinder, Alan S. (1997) *Economics, Principles and Policy*, 7 th edition, p. 283.
[8] Motta, as note 5 above, p. 201.
[9] M. 1524 *Air Tours/First Choice* [1999] OJ C 124, para. 97.

3 Merger Regulation Providing the Legal Basis

3.1 Introduction

To begin with, the concept of collective dominance is not explicitly covered by the Merger Regulation.[10] The Merger Regulation's applicability to the creation or strengthening of a dominant position enjoyed collectively by two or more firms was established by the Commission in its *Nestlé/Perrier* [11] decision. The ECJ confirmed the Commission's position in the *Kali&Salz*[12] judgement stating that the purpose of the Regulation of undistorted competition within the Common Market would be endangered seriously if the word "dominant position" was only referring to single dominance. Thus the concept of collective dominance is brought under the Merger Regulation by a teleological interpretation.

Consequently, a definition of 'collective dominance' cannot be found in the Merger Regulation. The appraisal of collective dominance is therefore solely guided by a number of criteria and principles set out in Article 2 of the Merger Regulation. In this chapter, the legal ground for the assessment of collective dominance will be broadly described, i.e. the applicable rules of the Merger Regulation will be introduced without going into detail. This legal basis of the merger control is only the starting point in this essay, the focus will be on the analysis and interpretation of case-law.

3.2 Scope of Application

The jurisdictional criteria for the European merger control are set out in Articles 1 and 3 of the Merger Regulation. Several formal criteria have to be fulfilled before the Merger Regulation can be applied on a merger.

Firstly, the merger has to have 'community dimension', Art. 1. In the Regulation there are several thresholds and which in combination with other criteria determine whether a merger has community dimension.

Secondly, not only mergers are embraced by the Merger Regulation, but all types of transactions covered by the definition of a concentration in Articles 1 and 3. In addition to 'mergers', the Merger Regulation thus comprises 'concentrations by acquisition of control' and 'full function joint ventures'.[13]

3.3 Substantial Appraisal

The substantial appraisal aims to assess whether a concentration is compatible with the common market. The test used in the appraisal is the so-called "test of market compatibility" which is stated in Article 2.3 of the Merger Regulation (Article 2.2 provides analogous for the reversed situation):

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[10] Cook/Kerse, as note 4 above, p. 168.
[11] M. 190 *Nestlé/Perrier* [1992] OJ C 53.
[12] M. 308 *Kali und Salz* [1993], OJ C 196.
[13] Ritter, Lennart/ Braun, W. David/ Rawlinson, Francis (2000) *European Competition Law: A Practitioner's Guide*, 2nd edition, p. 405.

> 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.

According to the test, there are four important issues in the substantial appraisal process:

1. What is the relevant market?
2. Is a dominant position created or strengthened?
3. Is effective competition significantly impeded?
4. Is there a causal connection between the concentration and the impediment of effective competition?

The first question concerning the definition of the relevant market falls outside the scope of this essay, as mentioned above. In the following, questions 2 to 4 are described more in detail.

3.3.1 Creating or Strengthening Dominance

In Article 2.1 of the Merger Regulation, there is a list of factors which the Commission has to take into account when assessing whether a dominant position is created or strengthened (the market compatibility test):

2.1 […] the Commission shall take into account:

a. the need to preserve and develop effective competition within the common market in view of, among other things,
   - the structure of all the markets concerned and
   - the actual and potential competition from undertakings located either within or without the Community;

b.
   - the market position of the undertakings concerned and their economic and financial power,
   - the opportunities available to suppliers and users,
   - their access to supplies or markets,
   - any legal or other barriers to entry,
   - supply and demand trends for the relevant goods and services,
   - the interests of the intermediate and ultimate consumers, and
   - the development of technical and economic progress provided that it is to the consumers' advantage and does not form an obstacle to competition.

These factors set out in the Merger Regulation constitute a non-exhaustive list [14], consequently there can be found 'new' factors in the judgements or decisions, such as 'transparency' and 'economic and structural links' as will be developed in chapters 5 to 6. Another issue which is a central subject in chapters 5 and 6, is that the factors apart from the listing are not explained in any way in the Merger Regulation, e.g. how they should be applied in an analysis.

3.3.3 Impediment of Effective Competition

The prerequisite 'significantly impede effective competition' is the qualitative element of the compatibility test. This requirement is met when the criteria 'creating or

[14] Korah, Valentine (2000) *EC Competition Law and Practice*, 7th edition, p. 10. Cook/Kerse, as note 4 above, p. 150.

strengthening dominance' in some way constitutes an obstacle to *effective* competition. 'Effective competition' bears upon the ability of imperfect markets to deliver products efficiently and at reasonable cost. *Perfect* competition does hardly ever exist in reality. Therefore reference in the Merger Regulation is made to effective competition.[15]

3.3.4 Causality

Finally there has to be a causal link between the creating or strengthening of a dominant position and a significant detrimental impact on effective competition. In the Commission's merger control, this prerequisite is subject to hypothetical test. This test was confirmed in the *Kali und Salz* case by the ECJ:

> The introduction of that criterion is intended to ensure that the existence of a causal link between the concentration and the deterioration of the competitive structure of the market can be excluded only if the competitive structure resulting from the concentration would deteriorate in similar fashion even if the concentration did not proceed.

4 The Economic Background

4.1 Introduction

The criteria listed in Article 2 of the Merger Regulation are loose factors indicating whether there is a risk for a (collective) dominance. To follow the factors like a 'checklist' by solely box-ticking is not enough. There is a need for a deeper economic understanding in order to bring the factors into a logical argumentation which convincingly establishes or denies the risk for collective dominance. We will see in the case-law analysis below, that the ECJ has quashed the Commissions finding of a collective dominance, because the argumentation of the Commission was not convincingly enough and since the Commission did not live up to the necessary *economic* standard in its assessment.

The theories I am going to present are central theories in economics. Even though all are more or less deficient, as a whole, they give useful insights in the complexity of the matter of oligopolies which in return will give a better common understanding of the 'economics behind' the concept of collective dominance.

4.2 Competition Theory

What is Competition? Which Market Structure is Desirable?
In this chapter (4.2), competition theories on efficiency and desirability of different market structures will be described. In chapter 4.4 they will be linked to the problem of the appraisal of collective dominance.

To start with, a remark should be made especially for those who are used to legal thinking. Economic theories are difficult to compare with each other if at all, since every economic theory in principle has its own focus, builds on a certain assumption

[15] Cook/Kerse, as note 4 above, p. 151

and establishes a specific rationality. [16] As a result, there is a wide range of competing views from conflicting schools, e.g. the Chicago School has developed as a direct challenge to the Harvard School. However most of the theories are relevant in a way, not as generalising theories but as exemplifying models about how economic rationality and argumentation in competition issues could look like and where there are contradictory issues.

What in general is undisputed is the distinction between the market forms of perfect competition, monopoly and oligopoly. This distinction has already been drawn up by the French economist Antoine Augustin Cournot (1801-1877). While in that time these three market forms where mainly related to the number of sellers[17], they were given more and differing contents in later theories as will be developed below. A central feature in this essay is the oligopoly problem, i.e. the problem of distinguishing between competitive oligopolies and anti-competitive, monopolistic oligopolies. Therefore, the focus in describing the theories will be laid on the oligopoly.

Before leading over to the description of the theories a warning is worthwhile to be made here: there does not prevail any consensus in the complicated competition matters. One may feel like US President Hoover who wearily requested "please find me a one-handed economist so we will not always hear on the other hand…".[18]

4.2.1 Perfect Competition, Monopoly and Oligopoly

There are various economic concepts regarding each of the three market forms of perfect competition, monopoly and oligopoly. Most controversial of these market forms is the oligopoly which is also the most important one in this essay. Bork states that "there appear to be as many oligopoly theories as there are economists who have written on the subject."[19] However, before coming into the details of various oligopoly theories, I will draw a general introduction about the essence of competition theory and about the distinction between the three market forms.

The 'Invisible Hand' of Competition

The maintenance of an undistorted competition is set out as a goal of the European Communities in Article 3(g) of the E.C. Treaty in order to support the establishment of the European common market stated in Article 2 of the same treaty. Generally, an undistorted competition has been held as highly desirable in most of the Member States, since it implies a number of positive effects, such as the allocation of scarce resources in accordance with consumer choice, the avoidance of waste in acquiring market power and the promotion of efficiency in other ways. [20] Since these positive effects are achieved by the competition on the market alone, without state involvement, the forces of the market competition are called the 'Invisible Hand'. [21] Adam Smith argued that the

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[16] Bladini, Filip, 'Den konkurrensrättsliga argumentationen' in: *Ånd og rett – festskrift til Birger Stuevold Lassen*, Oslo 1997.

[17] Hildebrand, Doris (1998) *The Role of Economic Analysis in the EC Competition Rules*, p. 141

[18] Burton, John, 'Competition over competition analysis: a guide to some contemporary economics disputes' in: *Frontiers of Competition Law*, edited by Lonbay, Dr. Julian, 1994, p. 20.

[19] Bork, Robert H., *The Antitrust Paradox – a Policy at War with Itself,* New York, 1993, p. 102.

[20] Korah, as note 14 above, p. 9.

[21] Ibid.

'Invisible Hand' generates harmony of all interests, i.e. private, self-interested interests as well as the general social good. [22] Therefore, he claims, the state should not intervene in the market, but it should provide the appropriate framework for an undistorted competition. This position of the state is even circumscribed as 'laissez-faire'. [23]

Control of Market Power
Obviously the 'Invisible Hand' is not always functioning properly. Where one single firm has market power, i.e. the ability to raise its prices significantly above the competitive price level and to maintain this high price profitability for a considerable time period[24], efficiency is not attained since there is no competition. This situation constitutes a pure monopoly. In such a situation, the state will intervene in order to restore the framework for undistorted competition. Thus, despite the principle of 'laissez-faire', the state will control market power. The reason for this intervention is that monopolies are not efficient. Why are monopolies not efficient, one could ask. Efficiency is a fundamental issue in competition theory if not its core element, so a definition should be given here.

Two Definitions on Efficiency
Economists define efficiency as the absence of waste, i.e. an efficient economy utilizes all of its available resources and produces the maximum amount of output that its technology permits.[25] More technically, economic efficiency will be achieved if an economy produces the output of each product indicated by the intersection of the demand curve and the marginal cost curve for that product. [26]

The second definition is more appropriate in order to explain market efficiency, since it is more concrete and provides a mechanism how efficiency is achieved. In this mechanism the profit-maximising firm [27] increases its output up to the level where the price it gets for a further unit sold is just equal to the extra cost for producing that unit, the so-called 'marginal cost' (MC).[28] Consequently, the condition for economic efficiency is that price (P) is identical with 'marginal cost' (MC).

Efficiency under Perfect Competition
In an efficient market, no firm has any market power, since the price is determined by market forces, i.e. interaction of supply and demand or the 'Invisible Hand'. [29] In such a market firms are price-takers, i.e. they cannot influence the price given by the market and in order to maximise their profits, they will produce until the price is identical with their marginal costs. This is precisely how perfect competition is thought to work. Under perfect competition efficiency can be expected automatically by the uncoordinated decisions of producers and consumers. [30] Prices will automatically equal the marginal cost of output for every firm, and the economically efficient level of output

[22] Adam Smith (1723-1790)
[23] Hildebrand, as note 17 above, p. 141. Baumol./Blinder, as note 7 above, p. 240.
[24] Baumol./Blinder, as note 7 above, p. 240.
[25] Ibid, p. 59.
[26] Hildebrand, as note 17 above, p. 195.
[27] The maximization of profit is presumed to be the goal of every economic actor in the basic economic theory. Cooter, Robert/Ulen, Thomas (1988) *Law and Economics*, p. 16.
[28] Hildebrand, as note 17 above, p. 195.
[29] Ibid.
[30] Baumol./Blinder, as note 7 above, pp. 245-247.

is produced.[31] To come back to the first definition on efficiency given above, the behaviour of firms in a perfect competition leads to an efficient allocation of resources which in the end maximizes the benefits to consumers.[32]

General Equilibrium and Pareto Efficiency
A ‚fundamental theorem' of welfare economics[33] is that in a perfect competition there is a close correspondence between a general equilibrium of competitive pricing and the so-called 'Pareto Efficient Allocation of resources'. [34] An equilibrium is a situation in which there are no inherent forces that produce change. Changes away from an equilibrium position will occur only as a result of "outside events" that disturb the status quo.[35] The situation of an equilibrium is the final end-state of the interaction of maximizing individuals or institutions. This end-state constitutes a pattern of interaction that tends to persist because everyone is maximizing simultaneously.[36]

It is true that Pareto efficiency is the third definition of economic efficiency mentioned in this essay, however it is not contravening the other two ones. This decision is simply taking another perspective, namely that of economic welfare. The 'Pareto Efficient Allocation' definition runs as follows: "An allocation of resources is Pareto efficient if it is not possible (through further allocations) to make one person better off without making someone else worse off."[37] The notion 'better off' is defined by individuals themselves.[38] 'Better off' refers naturally on the maximisation of individual profits.

To sum up, it could be said that the economic welfare theorem claims that an equilibrium in a perfect competition implies optimal resource allocation regarding all individuals or market players. Actually, there is even a theory that argues that there even can be a market equilibrium without an optimal resource allocation, but with each market player doing his or her best This so-called Nash equilibrium will be dealt with in the context of game theory in chapter 4.3.3.

The Three Market Forms' Desirability
The comparison of the price-output outcomes in the three market forms provides a ground on which the market desirability of each of the three market forms can be judged.[39] Under perfect competition price is equal to marginal cost, whereas under monopoly price is above marginal cost. Further, while the perfectly competitive firm gives rise to an efficient allocation of resources and thereby generates consumer benefits, a monopoly misallocates resources due to restricting its output to a level below that which it would obtain under perfect competition, in order to raise prices and profits.[40] Consequently, it is clear that perfectly competitive markets are desirable whereas monopolies are undesirable.

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[31] Hildebrand, as note 17 above, p. 142.
[32] Baumol./Blinder, as note 7 above, p. 297.
[33] Welfare economics are an abstract branch of economics that deals with normative questions. Burton, as note 18 above, p. 5.
[34] Burton, as note 18 above, p. 5. Nicholson, Walter, *Microeconomic Theory, Basic Principles and Extensions*, 7th edition, 1998, pp. 501-502.
[35] Baumol./Blinder, as note 7 above, pp. 74, 593.
[36] Cooter/Ulen, as note 27 above, pp. 16-17.
[37] Nicholson, as note 34 above, p. 502. Burton, as note 18 above, p. 5.
[38] Nicholson, as note 34 above, p. 502.
[39] Burton, as note 18 above, p. 6.
[40] Baumol./Blinder, as note 7 above, p. 297. Burton, as note 18 above, p. 6.

Regarding oligopoly, almost anything can happen, why it is impossible to generalise its effects on resource allocation and consumer benefits. [41] Nevertheless, it is quite easy to technically distinguish oligopoly from monopoly and perfect competition. In contrast to perfect competition, the decisions of firms in oligopoly have certain influence on market price.[42] In contrast to monopoly, there are several firms in a oligopoly, which are mutually dependent of each other. Therefore, in an oligopoly a firm's individual decision will induce reactions from the other oligopolists.[43] The complexity of the oligopoly's structure and effects will be subject in chapter 4.3.1 below.

Other Attributes of the Three Market Forms[44]
As already mentioned, the foremost criteria for the distinction between the three market structures is the number of sellers, i.e. the number of firms in the market. In addition there are several other attributes of these market forms, e.g. entry barriers, long-run profits, the market equilibrium and pricing play an important role in describing these market forms.[45] These have either already partly been dealt with or will be developed later on.

Reality contra Theoretical Concepts
Perfect competition and pure monopoly are very seldom in reality[46]. If one strictly holds to all the criteria set up for perfect competition by economists, e.g. the requirements that all actors in the market are perfectly informed about all prices, that the product on the market is assumed to be completely homogeneous and that there are no price-cuttings by individual firms, the concept of perfect competition appears to be completely unrealistic.[47] What is worse is that the concept of such a perfect competition is not even desirable since in such a market form there is no competitive rivalry at all, e.g. price discounting or the exercise of strategies for gaining competitive advantage over other firms. Another highly undesirable effect of the perfect competitive market is that the innovation process for new products will be hampered. [48] Nevertheless, the concepts of perfect competition and pure monopoly can be useful in the analysis of market forms, provided that one always keeps in mind that these are extremes and that the reality lies between them. It is therefore not astonishing that oligopoly firms, lying in between theses extremes, account for the largest share of the economy's output.[49]

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[41] Baumol./Blinder, as note 7 above, pp. 283, 297.
[42] Briones Alonso, Juan F., 'Economic Assessment of Oligopolies under the Community merger control Regulation' in: *ECLR [1993]3*, p. 118.
[43] Baumol./Blinder, as note 7 above, pp. 281-282.
[44] Actually there is a fourth market form: monopolistic competition (Baumol, as note 7 above, p. 297). In this context however the focus lays on oligopoly and the two other market forms, perfect competition and monopoly, are described as the extreme forms in between oligopoly is to be found. Thus monopolistic competition is not directly relevant here.
[45] Baumol./Blinder, as note 7 above, p. 297.
[46] Ibid.
[47] Burton, as note 18 above, p. 6.
[48] Ibid.
[49] Baumol./Blinder, as note 7 above, p. 297.

4.2.2 The Harvard School

As will be developed later on, the structural approach which the Harvard school supports is not totally outdated today. On the contrary, in a more general shape, it plays an important role in the European merger control.

This model as well as the following has been developed in the US, however the rationality in these concepts is so general that it is not specifically related to US merger control[50]. In contrast to the previous neo-classical approach, the Harvard school is founded on empirical facts. Its emphasis lays on markets and its central concept deals with barriers to entry, constituting a way of analysing market power. The paradigm the Harvard School works with is the so-called structure-conduct-performance paradigm ('SCP' or 'structuralist' approach).[51] The thesis according to the paradigm is that a market's structure influences to a certain extend its behaviour and performance. [52] The SCP paradigm is aiming to get away from price theory and to examine the factors causal to firms' behaviour.[53]

Regarding the issue of state intervention, the firms' performance has to be evaluated in order to justify such an intervention. Performance concerns for example the allocation of resources among different users.[54]

Further, Edward S. Mason, the inventor of the SCP paradigm, has stated the interesting view that monopolistic elements are practically everywhere and always there. This can be seen as a warning to lawyers to simply see monopoly as the opposite of free competition and to judge it therefore as being undesirably.[55]

The critique brought forward against this theory is that the notion of entry barriers is not very clear and that the entry barriers have been given too much weight in the analysis of the market structure.[56] Similarly, concentration indices are only one aspect of market structure and can therefore only be used as a proxy for a set of structural conditions conducive to market power.[57]

Finally, another weakness in the theory concerns the conduct element in the SCP approach. Since diversity and obscurity of conduct render it difficult to measure patterns of market conduct accurately, no meaningful association can be established either between market conduct and performance or between structure and market conduct. [58] This is enhanced by the fact that only rational business conduct can be taken into account.

[50] Burton, as note 18 above, p. 2.
[51] Ibid, pp. 8-10.
[52] Hildebrand, as note 17 above, p. 156.
[53] Ibid.
[54] Ibid, pp. 157-158.
[55] Ibid, p. 159.
[56] Burton, as note 18 above, p. 10.
[57] Hildebrand, as note 17 above, p. 161.
[58] Ibid, p. 162.

4.2.3 The Chicago School

It has already been mentioned above that the Chicago school is the answer to the theories developed by the Harvard school. The Chicago scholastic have come with competing and in general antagonistic views.

In sharp contrast to the Harvard School, the Chicago scholars argue that entry barriers are not only indicators for market power. On the contrary, entry barriers have to be distinguished between 'artificial' or 'contrived', i.e. legal barriers to entry, and other features of an industry which arose out of efficiency considerations. [59] Thus, the central issue in this scholastic approach to competition is the self-regulation of the market. The state should not intervene and the concept of entry barriers should take into account that super-normal profits only can persist due to state aid. It is inherent in the market's self-regulation that markets with high profits are attracting new industries and so super-normal profits will not persist for a long time.

Moreover, Chicago scholars consider competition as a dynamic process at the same time as they support an equilibrium model. It appears controversial to claim a dynamic concept at the same time as one is supporting a static model. However, they admit that the equilibrium model never is achieved because of continuous change in the limiting conditions.[60]

4.2.4 New Industrial Economics

The New Industrial Economics (NIE) is focusing on the question about what market action could be the rational strategy of a dominant firm and what constitutes only a temporarily or irrational deviation. [61] In this theory, game-theoretic models of strategic inter-action between firms are used. Since the game theory forms the most widely used approach for the analysis of oligopoly behaviour in economics,[62] it will be taken up separately in section 4.3.3.

4.2.5 Evolutionary Theories and Workable Competition

Evolutionary theories are based on a dynamic perspective on market developments distinguishing in every market a trend to an equilibrium. However, it is recognised that the achievement of the equilibrium is complex since there are constantly new variables and since competition makes up a process.

As the perfect competition does not exist in reality, the concept of workable competition has been developed in order to be capable to analyse markets in a better way. This concept aims to set up conditions for forms of competition which are economically desirable. According to J.M. Clark, one of the representatives of the concept of workable competition, the concept is defined as follows: "the most desirable forms of competition, selected from those that are practically possible, within the limits set by conditions which we cannot escape." Thus this is a normative approach, since norms are

[59] Burton, as note 18 above, p. 11.
[60] Hildebrand, as note 17 above, pp. 170-171.
[61] Burton, as note 18 above, p. 17.
[62] Baumol./Blinder, as note 7 above, pp. 290-291.

used to judge whether an economic circumstance is good or bad. [63] However this normative approach is also the weakness of the concept of workable competition. [64]

4.3 More Specific Theories on Oligopoly

Having covered the most important and relevant economic theories in chapter 4.2, I am now going to discuss the theories that are focusing on the oligopoly problem. Particularly in this chapter, it should be remembered that 'oligopoly' does *not* mean collective dominance and is *not* a problem in itself.

Moreover, from chapter 4.2.1 it should be called to mind that it is *not* possible to generalise an oligopoly's effects on resource allocation and consumer benefits. Characteristic for oligopolies is that the dominant firms are aware of that they are interdependent and although they will come to their own decision, they are influenced by their competitors since the action of one firm directly affects the other firms and vice versa. In such a situation the market interaction may include the extremes of a (nearly perfect) competition or of a monopoly.

4.3.1 Oligopoly Theories

As I have stated above, there are numerous theories concerning oligopolies. However, I will begin with three 'traditional' models about oligopoly, in order to provide some 'background information'. The usefulness I view in this background information is that these theories will exemplify the variation of possible approaches to the oligopoly problem and that some examples about deficiencies in the analysis of oligopolies are given.

Cournot[65] provided the first oligopoly model in 1838. He claimed that duopolistic firms providing a homogeneous product (spring water) and knowing the market demand curve, would choose simultaneously the output level. Each firm is thereby determining its output independently, according to its own reaction curve. The equilibrium of this model (Cournot equilibrium) is where the two reaction curves cut each other. [66]

In contrast to Cournot, the oligopolistic firms in Bertrand's model[67] decide simultaneously the price instead of output.[68] The price which both firms choose is identical to the marginal cost. Therefore, none of them will make profit.

According to Stackelberg's[69] oligopoly model, it is the output on which firms make their decision. However, in deviation to the above delineated theories, oligopolists do not act simultaneously, but there is a firm acting first. This firm, the so-called first-mover, has the advantage of determining a large output level which compels the competing firms to set their output level lower.

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[63] Hildebrand, as note 17 above, p. 152.
[64] Ibid, pp. 152-153.
[65] Augustin Cournot
[66] Carlton, D.W./Perloff, J.M. (1994) *Modern Industrial Organization*, 2 nd edition, pp. 238-239.
[67] Joseph Bertrand
[68] Carlton/Perloff, as note 56 above, pp. 244 et seq.
[69] Heinrich von Stackelberg

To sum up, all of the three theories presented above have a default, since they are restricting the firms' actions to the choice of price or output. In oligopoly nearly anything can happen, it is simply not true that oligopolists's action are restricted to price and output decisions.[70]

4.3.2 The Concept of Tacit Collusion

First of all, to avoid confusing about terms, co-ordinated effects is a synonym to tacit collusion. Unilateral effects, i.e. the effect of removing the competition between the parties through a merger, does not fall within the issue of collective dominance, as already explained in chapter 2.[71]

The Relevant Question in the Appraisal of Collective Dominance
As named repeatedly, collective dominance is not identical with 'oligopoly' and oligopoly is *not* a problem in itself. An oligopoly becomes first a problem if it is non-competitive or likely to become so. The key question in collective dominance assessment is thus, to what extent the market structure will allow oligopolists to behave as one single monopolist.[72] Since oligopolists even can attain a monopolistic market structure by establishing an explicit and binding agreement, the key question should be refined like that: after the merger, will the companies in the market be able to act in a co-ordinated way, without entering agreements which could be considered as cartels? [73] However, there is need for a last refinement to the question. Since collusion without explicit agreement is difficult to achieve, the question should be formulated like that: Will the merger increase the feasibility of co-ordination (tacit collusion?)[74]. The relevant question shows that there is a certain correspondence between the legal concept of collective dominance and the concept of tacit collusion.

The Concept of Tacit Collusion
To understand the core of the concept of tacit collusion, the notion of tacit collusion has to be defined. Collusion can not only be attained by explicit agreement but also by tacit agreement or co-ordination.[75] Economically it is however not meaningful to distinguish between tacit collusion and explicit collusion, since what enables the collusion in both cases is the same mechanism, i.e. an incentive for the firms to collude.[76] For the persistence of the collusion it is however not enough that the colluding parties have an incentive to do so. What is of crucial importance is the existence of a credible punishment mechanism to prevent the firms from cheating, i.e. for example undercutting the agreed price.[77]

4.3.3 The Game Theory

Game theory is currently the most widely used approach for the analysis of oligopoly behaviour. This theory is about firms strategic behaviour in an infinitely repeated played

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[70] Baumol./Blinder, as note 7 above, p. 283.
[71] Caffarra, Cristina/Kühn, Kai-Uwe, 'Joint dominance: The CFI Judgement on Gencor/Lonrho' in: *ECLR [1999]*, p. 358.
[72] Briones Alonso (1993), as note 42 above, p. 119.
[73] Ibid.
[74] Caffarra/Kühn, as note 71 above, p. 356.
[75] Rees, Ray, 'Tacit Collusion', in: *Oxford Review of Economic Policy*, Vol. 9, No. 2, p.27.
[76] Caffarra/Kühn, as note 71 above, p. 356.
[77] Ibid.

game and about the payoff (profit) connected to it. In contrast to the oligopoly theories described above, but also compared to the ‘basic competition theory’ with Pareto efficiency and to the Harvard and Chicago schools, the conduct of the firms to be investigated by the game theory is not an isolated action but part of a sequence of events, which is corresponding reality, because firms in a market do not merely meet once.[78]

As said before, the strategy is one of the two fundamental concepts in game theory. A strategy simply represents a firm’s decision or a set of decision, i.e. an operational plan, without valuation about the decisions quality.[79]

The other fundamental concept in game theory is the payoff matrix which delivers a game-theoretic analysis of oligopoly with two members, i.e. a duopoly. The payoff-matrix shows the profit (pay-off) each of the firms will earn, depending on the pricing strategies of each of the firms. The choice open to each firm is either to charge a “high price” or a “low price”. It is essential that the firms involved do not know anything about the other firm’s pricing strategy.[80]

THE PAY-OFF MATRIX[81]

		Firm B’s Strategy			
		High Price		Low Price	
Firm A’s Strategy	High Price	A gets 10	B gets 10	A gets -2	B gets 12
	Low Price	A gets 12	B gets -2	A gets 3	B gets 3

An example: the two upper left-hand cells indicate that if both firms decide to charge high prices, both A and B will get 10. Hence, the core of game theory is that if both firms charge a high price, both will make a higher profit than if both charged a low price. However there is also a risk for losses, namely if one firm charges a high price while the other firm chooses a low price, the firm with the high prices will make losses. For example, if firm A charges a high price and firm B charges a low price, firm A will lose (-2) and firm B will make profits (12).

The Maximin Strategy
From what precisely has been said about the risk for losses, one can conclude that both firms will avoid to charge high prices in fear of a loss. Such a decision constitutes a minimum payoff strategy. Even though this strategy is about ‘minimum’ profits, it is the result of a rational profit-maximising behaviour, since it is about the ‘highest minimum’

[78] Smith, Rhonda/Round, David, ‘Competition Assessment and Strategic Behaviour’ in: *ECLR [1998]*, p. 225.

[79] Baumol./Blinder, as note 7 above, pp. 290-292.
[80] Ibid.
[81] Ibid, p. 291.

of all possible strategies. The notion 'maximin criterion' stands for such a strategy and in the matrix it is when both firms choose a low price and will earn 3.[82]

The Prisoner's Dilemma Game

The pay-off matrix is also named the prisoner's dilemma game. It is just the same game but the players are two persons suspected to crime and their choice is either to confess or to deny. Since they are interrogated by the police in different rooms, they don't know what the other one is going to say. The best result is if both deny, then both would go free, since there is no other evidence. If one confesses and the other one denies, the denying person goes free whereas the confessing one has to go to prison. The maximin solution is for both to confess and receive a moderate sentence.[83]

The Nash Equilibrium[84]

Another strategy in the game theory provides the Nash equilibrium which compared to the maximin strategy is an optimist's way of dealing with uncertainty. As a difference to the maximin strategy, the Nash equilibrium realizes the possibility that the opponent may lack information to find out the most damaging countermove and the possibility of finding common ground, i.e. to collude (tacitly) and thereby gain monopoly profit. In a Nash equilibrium both firms make decisions which are the most profitable response to the other firm's decision. The situation in a Nash equilibrium thus resembles a (tacit) collusion between the players. Since the firms never beforehand know what the opponent's choice is going to be, the collusion mechanism will only be sustainable if there is a credible punishment mechanism which restrains from cheating. Credibility exists if the punishment mechanism can be exercised by each firm, i.e. if there are more than theoretical threats.[85]

Repeated Games

It has already been mentioned that business transactions in reality are no 'one-shot' actions, but 'repeated games'. This leads to the conclusion that what most probably will happen is that players learn from each other and cultivate their own reputation for playing (called tit for tat). From that point of view, collusion is likely to be established and so are credible punishment mechanisms, if collusion shall be sustained.[86]

Evolutionary Game Theory

The weakness of the game theory presented above is that all players are assumed to be rational. The evolutionary game theory is derived from biology and aims to compensate the deficiency of the game theory by taking into account that there are irrational and unsophisticated players as well. The fundamentals of that theory are heterogeneity, fitness and selection. I will not develop this theory any further, since this is enough in order to deliver the basis for the general economic understanding necessary in this essay.[87]

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[82] Ibid, pp. 291-292.
[83] Baumol./Blinder, as note 7 above, p. 292.
[84] John Nash was awarded the Nobel Prize in economics in 1994 for this strategy.
[85] Baumol./Blinder, as note 7 above, p. 292.
[86] Ibid, p. 293.
[87] Weibull, Jörgen W. (1995) *Evolutionary Game Theory*. The introduction of this book gives an idea about the theory, otherwise this book definitely is not written as a 'practioner's guide' for lawyers.

4.4 Conclusions Regarding the Appraisal of Collective Dominance

4.4.1 Structural and Behavioural Approach

There are two different approaches by which competition issues, in particular collective dominance, can be analysed.[88] First, there is the structural approach which concentrates on the assessment of factors such as market concentration, barrier to entry, product differentiation and extent of vertical integration. Second, the behavioural approach takes dynamic and strategic factors into account, which are not considered by the structural approach. An example to the behavioural approach are actions taken by firms to improve their competitive position; these actions are also called 'strategic behaviour'.

As to the assessment of collective dominance it is obvious that both approaches should be applied, despite the Merger Regulation's more structural approach. It is important to catch the dynamics of the adjustment process in an oligopoly as well as the structural factors.

The neo-classical theories, including the theory dealing with pricing and equilibrium, which I called 'basic competition theory' above, the Harvard school and the Chicago school, constitute rather static than dynamic concepts. The more specific theories on oligopolies, like Cournot and the other theories in chapter 4.3.2, completely lack dynamic considerations. On the other hand, the game theory includes dynamic considerations on firms' strategic behaviour. Thus, the game theoretical approach might be quite useful for the understanding of the economics behind the concept of collective dominance and probably also for the analysis of the case-law.

4.4.2 Conclusions

The relevant question in the concept of collective dominance is whether economic facts will make tacit collusion likely in the post-merger market. This has already been mentioned in chapter 2 when defining the concept of collective dominance. Now, after the economic background has been developed, we can consider the question as consisting of a structural and a dynamic element. On the one hand, it is important for the prospective analysis of the post-merger market to concentrate on the market structure. On the other hand, the consideration of firms' strategic behaviour is essential in order to correctly determine the situation on the post-merger market.

Which theories will help best to understand the prospective analysis' in merger control? In the introduction of this chapter I stated that the economic theories as a whole will give a better common understanding of the 'economics behind' the concept of collective dominance. 'As a whole', all the theories I have introduced in this essay can be summarized for the aim of this essay as a 'structure-conduct-performance (SCP) theory'. The SCP does not need to be solely related to the Harvard school. In a practical guide to European Union Competition Policy and Law, Robert Koch generally refers to the SCP approach without distinguishing any particular school or theory.[89] In my view, such a broad distinction makes sense, because in general it is true that the structure of a competitive system will determine the conduct of individual competitors, and the sum

[88] Smith/Round, as note 78 above, pp. 225-227.
[89] Koch, Robert (1994) *European Union Policy Briefings: Competition Policy and Law*, pp.37 et seq. and pp. 41 et seq.

of their competitive efforts within a particular competitive system will determine its level of performance.[90]

On the other hand, it is also true that the structural factors which determine the market behaviour and the market performance according to the SCP theory, may be changed by the behaviour of the undertakings.[91] This thesis about the influence of individual undertakings on the market structure becomes particularly important in the oligopoly issue. In oligopolies, firms are no longer price-takers (as explicated above), and therefore may take influence on the market structure. Regarding this matter, Caffarra and Kühn express the undertakings' rational economic behaviour as "firms '*learn to play the game'* to their mutual advantage".[92]

To sum up, in the assessment of a collective dominance, both a structural (SCP theory) and a dynamic (game theoretical) approach are necessary. This view coincides also with Hildebrand's general definition of competition: "For our purposes competition can be understood as a *process* of responding to a new force and a *method* of reaching a *new equilibrium*[93]". The 'process' represents the dynamic, game-theoretical element and the 'equilibrium' the structural, static element.

Finally, I want to explain why I am satisfied with a common economic understanding instead of using specific economic theories. The common economic understanding is more likely to give a realistic idea about how different issues *could* be tackled. In chapter 5 it will be analysed how different issues actually *are* solved. A comparison between the actual result and the result which economically makes sense, may give some indications on how different aspects in future cases are going to be treated.

5 Analysis of the Case-Law

5.1 Introduction

In the introduction of this essay, I have cited Commissioner Mario Monti saying in a speech on the 10th anniversary conference of the E.C. merger control that the Commission is preferring a case-by-case approach for the assessment of collective dominance rather than restricting the analysis to a strict analytical and formal investigation. The Commissioner adds that the merger appraisal is continuously refined. Moreover, he gives examples about which factors are used in order to analyse whether the structure of the relevant market is leading to a higher degree of tacit co-ordination between the market players: the degree of concentration, price transparency, product homogeneity, cost symmetry, slow market growth, barriers to entry and structural links.[94]

Finally and of great significance, the Commissioner gives a statement about what could be considered as the core of the concept on collective dominance:

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[90] Ibid, pp. 36, 41.
[91] Ibid, p. 41.
[92] Caffarra/Kühn, as note 71 above, p. 355.
[93] Hildebrand, as note 17 above, p. 139. (The italics are made by the author of this essay.)
[94] Monti, as note 2 above.

> "The presence of such factors increases the likelihood that major market players monitor each other's behaviour, detect deviation from tacitly agreed price and retaliate against the one who deviates".[95]

The key elements of this statement on the concept of collective dominance can be summarized in what I call the 'relevant question'. The 'relevant question' according to the Commissioner's assertion is whether a factor or a number of factors increase the likelihood of sustainable tacit collusion in the post-merger market. The mutual monitoring of each other's behaviour, makes tacit collusion possible. The possibility to detect deviation from tacitly agreed price and to retaliate against the one who deviates renders tacit collusion sustainable.

In this chapter, I am going to analyse how the relevant question is formulated in each individual case from the *Nestlé/Perrier* case, where the concept of collective dominance had been applied by the Commission for the first time, until today. Further I am aiming to study how the concept of collective dominance has been refined and whether the Commission really is taking a dynamic casuistic approach avoiding the formal application of criteria in its argumentations. Finally, some cautious inquiries about how the Commission uses its discretionary margin originating in the economic nature of the provision it has to apply. Thus, chapter 5 deals with Question 1-3, which have been introduced under 1.1.

5.2 Nestlé/Perrier[96]

In this case Nestlé aimed to acquire Perrier, both were market players on the French market of bottled water. The acquisition would have reduced the number of big firms in the relevant market from three to two. The two remaining significant firms on the French market for bottled water would have been holding about 75 % of the market volume and more than 82 % of the market value.

In *Nestlé/Perrier* the Commission established the concept of collective dominance under the Merger Regulation. Before this case it had been uncertain whether only single firm dominance or also mergers leading to a collective dominant position were covered by the Merger Regulation. The following factors have been considered leading to a collective dominant decision[97]:

- concentration after the merger: duopoly with combined market shares of 82 % (value) and 75 % (volume)
- reduction from three to two national competitors
- price transparency & monitoring of the duopolist's market behaviour
- firms were similar in size, capacities and market shares
- price inelastic demand
- neither company enjoyed a significant cost advantage
- mature technology
- companies had acted together to hamper the market entrance of a third company
- no significant competitive constraint by firms acting at the local level
- high barriers to entry

[95] Ibid.
[96] *Nestlé/Perrier*, as note 11 above.
[97] Ibid, para. 119-130.

Relevant Question
The conclusion that the Commission is drawing from the similarities between the remaining market players with respect to their size and nature, their capacities and their market shares, is that this evokes "their reciprocal dependency and thus creates a strong common interest and incentive to maximize profits by engaging in anti-competitive parallel behaviour"[98] The relevant question which could be derived from this is whether a factor gives rise to reciprocal dependency or whether there exists a strong common interest which causes an incentive to engage in anti-competitive parallel behaviour.

Another way to put the relevant question can be gathered from paragraph 124 where the Commission states: "The proposed concentration facilitates and reinforces the likelihood of such a strategy being tacitly adopted by Nestlé and BSN" Transformed into the relevant question this would be: Do the criteria to be investigated facilitate or reinforce the likelihood of a tacitly adopted strategy by the leading market players?

These two question do not contradict each other but they can be summed up in what appears to be the approach adopted by the Commission in this case. The approach is to find out how likely or how easy it will be for oligopolists to collude or to avoid competition among themselves after the merger.

Does the Argumentation in the Decision Make Sense Economically?
All the factors which where examined by the Commission have in common that they are referring to the market structure. The approach taken by the Commission seems therefore to be a structural approach. However, there can be clearly traced a behavioural approach as well. Strategic and behavioural elements are included in the Commission's statements which are forming the relevant question. In paragraph 124 the Commission uses the expression 'tacitly adopted *strategy*' and in the previous paragraph the Commission analyses if the factor of similarities between the remaining market players might give rise to 'an incentive to engage in anti-competitive parallel *behaviour*'. Economically, the consideration of the firm's behaviour favours without any doubt a better result in the investigation of an oligopoly.

The reference in paragraphs 121-122 of the decision, to the "tacit co-ordination" and to the "immediate detection of any deviation […] of the expected performance" reminds of the game theory. Game theory in a nutshell is to monitor each other's behaviour, to detect deviation from tacitly agreed price and to retaliate against the one who deviates. The last named aspect of retaliation can however not be found in the Commission's decision. This is economically not quite reasonable, since the sustainment of tacit coordination depends on the existence of a credible punishment mechanism.

5.3 Kali und Salz[99]

This case was about a proposed joint venture between a subsidiary of BASF, the Kali und Salz AG, and the Treuhandanstalt. The joint venture was aiming to combine the potash and rock-salt businesses of 'Kali und Salz' with those of the former East German producer Mitteldeutsche Kali AG ("MdK"), where the Treuhandanstalt was the only shareholder.

[98] Ibid, para 123.
[99] *Kali und Salz*, as note 12 above.

The Commission's *Kali und Salz* decision was appealed to the ECJ. In its decision *France v. Commission*[100] the ECJ for the first time confirmed that collective dominance falls within the scope of the Merger Regulation. Collective dominance is defined as two firms becoming a single entity regarding the links between them. Although affirming the Commission's decision in this point, the ECJ quashed the decision, holding that there is a high standard of proof to establish collective dominance. The Commission did however not live up to this standard in its *Kali und Salz* decision.

The Commission's Decision
The Commission held that the joint venture after the merger is likely to create a collective dominant position together with the French firm SCAP. The relevant market was defined to be the E.C. excluding Germany. In its decision the Commission was relying on the factors from the checklist, especially on the following factors:

- the increase of market share and the degree of concentration
- the links between the parties
- factors making it easier to collude (market transparency, homogeneous products, absence of technical innovation, prior competition law infringement by 'Kali und Salz' and SCPA) [101]

However, the Commission cleared the merger provided that the parties would comply with some specific obligations issued by the Commission.[102]

The Judgement
The Commission's decision was regarded by the ECJ deficient in such a way that it revoked the Commission's decision wholly.[103] Above all, the ECJ declared how the Commission should fulfil its commitment concerning merger control in general. It is a crucial declaration which is also taken up in later cases and which therefore should be cited here:

> […] the basic provisions of the [Merger] Regulation, in particular Article 2 thereof, confer on the Commission a certain discretion, especially with respect to assessments of an economic nature. [104]
>
> Consequently, review by the Community judicature of the exercise of that discretion, which is essential for defining the rules on concentrations, must take account of the discretionary margin implicit in the provisions of an economic nature which form part of the rules on concentrations. [105]

Hence, the Commission has a certain discretion how to apply Article 2 in the Merger Regulation, the 'checklist'. The Commission is even *obliged* to use its discretion, since the rules in the Merger Regulation generally are not precise enough, taking into account that the situation might differ considerable from case to case and that the application of the criteria set out in Article 2 of the Merger Regulation therefore might need a different interpretation in each individual case.[106]

Despite this discretion, the Commission has to keep a high level of economic analysis in its evaluation. This high level of economic standard implies in the first place that the

[100] C-68/94 and C-30/95 *France v. Commission* [1998] ECR I-1375.
[101] *Kali und Salz*, as note 12 above, para. 51 et seq.
[102] Ibid at para 63 and Article 1.
[103] *France v. Commission*, as note 100 above, para. 259.
[104] Ibid, para. 223.
[105] Ibid, para 224.
[106] Koch, as note 89 above, pp.17, 190.

Commission has to fulfil a high standard of prove before it can block a merger. [107] The strong onus of prove the Commission has to meet can be gathered from the judgement where the ECJ rejects the Commission's arguments in particular regarding the three factors, market shares, structural links and competitive constraints by third parties. In this part of the judgement, another aspect of the economic standard is paid direct attention to: the necessity to consider dynamic effects in the analysis.

Standard of Proof and Dynamic Analysis

The Commission simply based its decision on static factors listed in the 'checklist'. The factors which the Commission relied on are cited in paragraph 219 of the judgement as follows:

- the maturity of the potash market
- the homogeneity of the product
- the lack of technical innovation
- transparency as concerns output, demand, sales and prices
- the "exceptionally" close links over time between 'Kali und Salz' and SCPA, which together account for about 53% of the Community market excluding Germany
- the very limited degree of supply from Germany to France through channels other than SCPA
- the fact that MdK is the second largest potash producer despite its capacity is only used to 50%
- the total market share of Kali and Salz/MdK and SCPA will amount to 60%
- the fragmentation of other suppliers
- other suppliers lack the sales base to survive against 'Kali und Salz' and SCPA

As already mentioned, the ECJ disapproved the Commission's analysis focusing its argumentation mainly on

I. the Commission's reliance on market shares without assessing their significance in a dynamic, economic context that takes into account strategic factors of firms' behaviour,
II. the Commission's reliance on special links between 'Kali und Salz' and SCPA and
III. the Commission's reliance on the absence of competitive constraint by third parties.

I.

As to the first aspect, the dynamic approach in the analysis emphasised by the ECJ leads to insights which are contradicting the feasibility of collective dominance. To start with, there is no presumption about market shares when the remaining duopolists hold 60% of the market. [108] This would be a purely static investigation. In the dynamic analysis of this case, asymmetries played a decisive role pointing to a considerable imbalance between the members of the oligopoly which probably would reduce the incentives of the oligopolists to collude. In the case at issue, the asymmetries between the oligopolists referred to their financial resources. 'Kali und Salz' is a subsidiary of BASF which has considerable greater economic power than SCPA's parent company, EMC. [109]

Further, the Commission neglected to take into account that the potash market was in decline. According to common sense, the ECJ states that "falling markets generally are

[107] Korah, as note 14 above, p. 313.
[108] *France v. Commission*, as note 100 above, para. 226.
[109] Ibid, para. 237.

considered to promote, in principle, competition." [110] Finally, the ECJ calls attention to the fact that MdK is the second largest potash producer but uses merely 50% of its capacity. This would entail that 'Kali und Salz' industrial capacity as a consequence of the merger would be considerably strengthened. This is illustrated in the judgement by figures about how much the firms respectively account for of the total potash production in the Community: 'Kali und Salz' and MdK account for 35% and 25% respectively, SCPA for 20%.[111]

All these dynamic considerations, which reveal firms' potential strategic behaviour, represent the economic standard the Commission has to take into account in its future merger cases. In the ECJ's argumentation it appears clearly that the checklist does not provide more help than reminding which economic factors there are to be considered, it is of course not even exhaustive. By complying with the economic standard, the Commission will automatically be able to demonstrate a sufficient legal standard, proving that the situation is examined according to the legal concept of collective dominance.

II.

Regarding the Commission's reliance on special links between 'Kali und Salz' and SCPA, the ECJ asserted that the Commission had not given sufficient reasons for establishing the links it had alleged. As to the membership in the 'Kali-Export' export cartel the Court found that a causal link between 'Kali und Salz' and SCPA's membership in the cartel and their anti-competitive behaviour on the relevant market had not been proved by the Commission.[112]

With reference to the alleged links between 'Kali und Salz' and SCPA in respect of sales in France, that ECJ disapproved the Commission's argumentation noting that the only specific distribution links between 'Kali und Salz' and SCPA where referring to kieserite, a product that was not part of the relevant product market.[113]

In order to reach the necessary legal standard when issuing a decision about collective dominance, there is a strong onus of proof. With respect to the existence of structural links, a causal link has to be established as pointed out by the ECJ regarding the 'Kali-Export' export cartel.

III.

The third deficiency regards the Commission's reliance on the absence of competitive constraint by third parties. First, the Commission had stated that imports from the CIS amounted to 8% in 1992 in stead of using the information from the French Government according to which the imports aggregated to 11% in 1993.[114]

Second, the Commission's arguments that the Spanish producer Coposa lacked the necessary base to increase or maintain its market share were flawed by the ECJ. The ECJ noted that although one of Coposa's mines would be closed, Coposa's overcapacity

[110] Ibid, para. 238.
[111] Ibid, para. 236.
[112] *France v. Commission*, as note 100 above, para. 228.
[113] Ibid, para. 230.
[114] Ibid, para. 242-243.

of 70% probably would enable Coposa to increase its market share at the expense of Kali und Salz/MdK/SCPA in contrast to what the Commission had suggested.[115]

A high economic standard implies the dynamic analysis of *all* relevant micro-economic factors being at one's disposal. Relating to the concrete example of competitive pressure of third parties, the dynamic perspective includes production capacity as well as the potential of overcapacity.

Relevant Question
In its judgement the ECJ states that collective dominance is likely to arise when

> […] effective competition in the relevant market is significantly impeded by the undertakings involved in the concentration and one or more other undertakings which together, in particular because of correlative factors which exist between them, are able to adopt a common policy on the market and act to a considerable extent independently of their competitors, their customers, and also of consumers. (paragraph 221)

Although describing in detail how a collective dominant position is established, the ECJ does not define what it means by "correlative factors". This will first be clarified in the *Gencor/Lonrho* decision[116] which will be discussed below. Moreover, in this judgement the ECJ does not make any statement on the role of punishment mechanisms sustaining collusion between oligopolists.

Does the Argumentation in the Judgement Make Sense Economically?
The crucial ruling of the ECJ in the *Kali und Salz* judgement is that the Commission under the Merger Regulation enjoys considerable discretion in determining whether a concentration will give rise to collective dominance. In particular, the Commission does not have to take account of prior cases, i.e. there is a case-to-case approach in merger control.[117] Economically this is reasonable since the Merger Regulation does not and cannot stipulate rules in detail applicable for every single case. The complexity of the 'multifactorial economic analysis' and the great variety of different market types make such an approach necessary. This approach is also consistent with the views of independent economists who have considered this issue for the Commission.[118]

The Commission's considerable discretion is bound to a teleological approach. [119] Instead of formally apply the checklist criteria, the Commission primarily has to observe the purpose of the regulations. Again, this makes economically sense, since trying to meet the purpose of a rule leaves room for a rich variety of arguments including a dynamic analysis.

According to the relevant question, the key elements in the concept of collective dominance in *Kali und Salz* are, "common policy through special links" and the ability of the firms to "act to a considerable extent independently from their competitors and customers". It has already been pointed out above, that the consideration of a

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[115] Ibid, para. 247-248.
[116] Case T-102/96 *Gencor v. Commission* [1999], para. 276.
[117] Venit, James S., 'Two steps forward and no steps back: economic analysis and oligopolistic dominance after Kali & Salz', in: *CMLRev. [1998]35*, p. 1112.
[118] Ibid, p. 1112.
[119] Zekos, Georgios I., 'The New E.U. Approach to Mergers and Market Integration' in: *ECLR [2000]*, p. 40. Venit, as note 117 above.

punishment mechanism sustaining collusion is missing from an economically point of view. Further, the Court neither specifies what it understands by “correlative factors” nor clarifies if they constitute a necessary precondition.

The ability to act to a considerable extent independently from one’s competitors does not fully coincide with the economic proposition on which the legal concept of collective dominance is based.[120] It is an economic rationale that in highly concentrated markets the market players recognise their interdependence and the futility of aggressive competitive behaviour. Thus, the members of a collective dominant position may act independently from each other formally spoken, but they adapt to each other’s reactions. However, when acting *collectively*, the members of a collective dominance are to a considerable extent independent from their competitors and customers.

The overall line of reasoning of the ECJ is reasonable, in particular the way it examines the Commission’s arguments. The ECJ had however not represented the factors of asymmetries and declining demand to their full extent, especially concerning their interrelations with other factors. In the following, I will show that these factors might have ambiguous effects on the market when they are considered in the context with other factors. This makes it more difficult to clearly determine the effects of these factors’ existence in a specific case.

Asymmetries between ‘Kali und Salz’/Mdk and SCPA have been considered by the ECJ not supporting the Commission’s finding of collective dominance.[121] This coincides with the conception of industrial economics which claims that the existence of significant asymmetries will decrease the likelihood of collusion since asymmetries may create conflicting interests.[122] However, when asymmetries interplay with the factor ‘lack of excess capacity’, the effect on an oligopolistic market may be ambiguous. On the one hand, the lack of excess capacity implies that there is no credible punishment mechanism which may limit the oligopolists ability to discipline each other. On the other hand, this lack might provide incentives to collude since there is no possibility to compete on prices by increasing market shares.[123]

Regarding declining markets, the same is true as for the factor of asymmetries. It may create both incentives to collude and competition between oligopolists.[124] Here again capacity utilization plays an important role. Firms may have incentives to collude if they do not have enough capacity to compete.

Apparently, having the ambiguity of certain factors in mind, the situation in the case is much more complicated than the ECJ has put it. In addition, given the asymmetries in the oligopolist’s capacities, ‘Kali und Salz’/MdK disposes over excess capacity which enables it to discipline SCPA but which on the other hand also reduces ‘Kali und Salz’/MdK’s incentive to collude. The situation for SCPA is precisely the other way round. It seems difficult if not impossible to make game theory go together with the ambiguous character of capacity. So, the question is, will ‘Kali und Salz’/MdK want to “play the game”? It could, but does it have an incentive?

[120] See chapter 2. Cook/Kerse, as note 4 above, p. 171.
[121] C-68/94 & 30/95 *France v. Commission* [1998] ECR I-1375, at paras 235-237, 239
[122] Venit, as note 117 above, p. 1113.
[123] Venit, ibid. Zekos, as note 119 above, p. 40.
[124] Venit, as note 117 above, p. 1114. Zekos, ibid.

One important conclusion to be drawn from the analysis above is that the economic analysis does not give results which are easy to predict if at all. The outcome depends on the economic criteria taken into account and on how they are evaluated. Of course, all possible criteria have to be considered as to whether they are relevant, but there is no complete list of factors in the Merger Regulation nor in economic theory. Another essential conclusion reading the ECJ's judgement is that 'the judgement is primarily an economic one' [125], since the legal rules only are the starting point, the main emphasis lays on the economic argumentation. A 'high standard of economic analysis' is the crucial statement of the ECJ in this judgement. A discussion about the wider impact of what these two conclusions imply will be taken up in chapter 6 under 6.6.3.

Finally, regarding the systematic economic evaluation in the ECJ's argumentation, I want to point out a few aspects, beginning with the statement of two scholars and practitioners: Ysewyn and Caffarra state that "both the Commission's decision and the ECJ's judgement fall short of a systematic economic evaluation of the likely impact of the merger on the firms' incentives to co-ordinate their actions." With this statement they refer to two issues: the necessity of structural link for the finding of a collective dominant position and the emphasis on duopoly as the preferred interpretation of collective dominance. [126]

In this case it does not become clear whether structural links are necessary for establishing a collective dominant position. As we will later see in the judgement *Gencor v. Commission*, the CFI explicitly declares that structural links are *not* indispensable in order to prove collective dominance. Economically it would neither be reasonable to make this to a requirement, since what matters in the collective dominance assessment is whether the leading firms have an incentive to establish a sustainable collusion and collusion does not depend on the existence of links between the firms. Ysewyn and Caffarra take cross-shareholdings as an example showing how the existence of structural links can lead to the effect of facilitating collusion. Cross-shareholdings reduce the incentive to undercut, but at the same time this may also reduce the incentive to retaliate and will thus facilitate collusion. [127] This example illustrates that what is decisive in the evaluation of collective dominance is *how* structural links create an incentive to collude and how this collusion is sustained by a possible retaliation mechanism and *not* the existence of structural links themselves.

As to the alleged preference of the Commission to interpret the concept of collective dominance as a duopoly, Ysewyn and Caffarra criticise that the concept of collective dominance does not only imply duopolies. I will come back to that in the analysis of the *Price Waterhouse/Coopers & Lybrand* decision.

5.4 Price Waterhouse/Coopers & Lybrand[128]

This case concerned the merger of Price Waterhouse and Coopers & Lybrand which represent two of the so-called "Big Six" accountancy firms.

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[125] Venit, as note 117 above, p. 1105. Zekos, ibid.

[126] Ysewyn, Johan/Caffarra, Cristina, 'Two's Company, Three's a Crowd: The Future of Collective Dominance After the Kali & Salz Judgment', in: *ECLR [1998] 7*, pp. 470-471.

[127] Ibid, p. 470.

[128] M. 1016 *Price Waterhouse/Coopers & Lybrand* [1999] OJ L50/27.

As in prior decisions, the Commission relied on the checklist-criteria:

On the demand side
- moderate growth
- inelastic demand

On the supply side
- high concentration
- high market transparency
- homogeneous product
- mature production technology
- high entry barriers
- suppliers with structural links [129]

Relevant Question

Referring to these criteria, the Commission determines that "These supply side characteristics make it easy for suppliers to engage in parallel behaviour and provide them with incentives to do so". This appears to be the relevant question implying that collective dominance will arise when the factors from the checklist create incentives to collude for the oligoplists. In its decision the Commission does however not mention how that collusion will persist, i.e. the possibility of punishment has not been taken into account.

Key Issues

Three important statements on key issues can be distinguished in this decision. First, the Commission ruled that economic or structural links are no longer a necessary prerequisite in the concept of collective dominance. Second, the Commission laid heavy weight on the checklist asserting that

> The risk of the creation of oligopolistic dominance arises in large part from the existence of the general characteristics described in paragraphs 98-101 [the checklist]. [130]

Finally and most important, the Commission gives a clear hint about the number of oligopolists constituting a collective dominant position. The Commission declares that oligopolies involving more than three or four suppliers are unlikely. According to the Commission, this would be the case because three or more members in a oligopoly have complex relationships with each other implying a stronger temptation to deviate from collusive behaviour.[131]

Does the Argumentation in the Decision Make Sense Economically?

As mentioned before, a collective dominance can only persist if there exists a credible mechanism to discipline its members from deviating of collusive behaviour. From a common economic point of view it seems to be deficient for the collective dominance appraisal not to take possible punishment mechanisms into account.

The emphasis on the checklist gives rise to some critical reflections, too. The Commission cites in this decision the ECJ's statement from the *Kali und Salz* case, that there is a strong burden of proof on the Commission regarding collective dominance. [132]

[129] Ibid, para. 96-101.
[130] Ibid, para. 112.
[131] Ibid, para. 103.
[132] Ibid, para. 104.

An emphasis on the checklist may however impede the 'considerable discretion' the Commission should use in its assessments. However, it is not clear, neither explicitly nor implicitly, whether the 'considerable discretion' was determining in this case.

Finally, there is the issue about how many firms at a maximum can create a collective according to the Commission. This statement might be a bit too general and numerical in order to be meaningful from an economists point of view. Legally it is certainly of advantage to define for example how many firms usually could form in a collective dominance. Moreover, this declaration does confirm a preference of the Commission to interpret the concept of collective dominance as a duopoly.[133]

5.5 Gencor/Lonroh[134]

This merger aiming at bringing together the platinum activities of Implants (owned by Gencor) and Eastplats/Westplats (owned by Lonrho's LPD) would have reduced the number of companies controlling platinum reserves in South Africa from three to two. However the proposed merger was blocked by both the Commission and by the CFI after it had been appealed. The CFI completely upheld the Commission's decision, therefore only the judgement will be analysed here.[135]

Gencor/Lonrho was the first proposed merger which was *prohibited* under the Merger Regulation on grounds of collective dominance. It is consequently also the first time that the Court upheld a Commission's decision blocking a concentration under the Merger Regulation on the same basis.

In this judgement the CFI repeated the crucial assertion of the ECJ in *Kali und Salz* that the Commission has at its disposal a certain discretion, particularly regarding assessments of an economic nature. Moreover the CFI confirmed the high economic standard the Commission has to live up to in its investigations.[136]

The CFI accentuated in its assessment that after the merger the market would have become more concentrated. According to the Commission the market had the characteristics of an oligopolistic market:

> (a) on the demand side, there is moderate growth, inelastic demand and significant countervailing power. Buyers are therefore highly vulnerable to a potential abuse,
> (b) the supply side is highly concentrated with high market transparency for a homogenous product, mature production technology, high entry barriers (including high sunk costs) and suppliers with financial links and multi-market contacts. These supply side characteristics make it easy for suppliers to engage in parallel behaviour and provide them with incentives to do so, without any countervailing checks from the demand side. [137]

In addition to these characteristics, two other factors were essential for the finding of a collective dominance. These were the symmetries between the two leading firms Amplats and the new Implats/LPD in the post-merger market and the high fragmentation of market supplies. After the merger the two leading companies would

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[133] Ysewyn/Caffarra, as note 126 above, p. 471. See also above in the analysis of Kali und Salz.
[134] M. 619 *Gencor/Lonrho* [1996] OJ C 314.
[135] *Gencor v. Commission*, as note 116 above.
[136] *Gencor/Lonrho*, as note 134 above, para. 164.
[137] Ibid, para. 141.

have had a similar output amounting to approximately 40% each of the market. Further, their cost structures would have become more symmetrical too, since according to the Commission the merger of the low-cost producer LPD and the high-cost producer Implats would have resulted in a similar cost structure compared with Amplats.

To sum up, the oligopolistic market structure, the absence of asymmetries and the fragmented supplies represent factors which might have reduced the price competition on the relevant market significantly, implying that the two leading firms would not have been competing aggressively with each other.

Relevant Question

The relevant question in the analysis of collective dominance is thus whether the existence of certain factors are likely to make it easier for the remaining firms not to compete with each other according to this judgement. Indeed, anti-competitive parallel conduct would not only have made anti-competitive parallel market conduct easier in this case but it "would, economically, have constituted a more rational strategy than competing with each other, thereby adversely affecting the prospect of maximising combined profits".[138] The last statement shows that the CFI also considers strategies in firms' market behaviour and not only static factors relating to the market structure.

Retaliatory Measures and Structural Links

When analysing the criteria which are thought to enhance a collusive outcome, the CFI made important statements regarding retaliatory measures and structural links. In the context of its assessment of market transparency the CFI declared:

> Price transparency is a fundamental factor in determining the level of market transparency where there is an oligopoly. By means of the price mechanism, the members of an oligopoly can, in particular, immediately discern the decision of other members of the oligopoly to alter the status quo by increasing their market share and they make such retaliatory measures as may be necessary in order to frustrate actions of that kind. [139]

Thus, the CFI explicitly names the possibility of retaliatory measures to discipline the members of an oligopoly to comply with a certain collusive market behaviour. It is however not put by the Commission as being a necessary criteria, it is simply pointed out as a possible market conduct.

As to the necessity of structural links, the CFI ruled that it was not necessary to establish links between the firms in a collective dominant position. [140] Eventually, after the uncertainty regarding this issue in previous cases, especially the *Kali und Salz* judgement where much weight was laid on the importance of links, this issue seems to be clarified. Furthermore, concerning links, the CFI stated that

[138] Ibid, para. 236.
[139] Ibid, para. 227.
[140] Ibid, para. 273.

> […] there is no reason whatsoever in legal or economic terms to exclude from the notion of economic links the relationship of interdependence existing between the parties to a tight oligopoly within which, in a market with the appropriate characteristics, in particular in terms of market concentration, transparency and product homogeneity, those parties are in a position to anticipate one another's behaviour and are therefore strongly encouraged to align their conduct in the market, in particular in such a way as to maximise their joint profits by restricting production with a view to increasing prices. In such a context, each trader is aware that highly competitive action on its part designed to increase its market share (for example a price cut) would provoke identical action by the others, so that it would derive no benefit from its initiative. All the traders would thus be affected by the reduction in price levels. (paragraph 276)

Paragraph 276 can be read as follows: oligopolistic interdependence can amount to a link that would make it easier to establish collective dominance. [141] More generally, the CFI specified and extended the concept of collective dominance regarding the 'correlative factors' that it did point out in the *Kali und Salz* case. The uncertainty as to what such 'correlative factors' imply has been eliminated by this judgement. 'Correlative factors' do not have to be structural links, it is sufficient with a relationship of economic interdependence between the leading firms.[142]

Does the Argumentation in the Judgement Make Sense Economically?
There are several statements in the judgement which coincide with economic common sense. In the first place, the CFI's ruling in paragraph 276. In that paragraph, the CFI states that the notion of links in collective dominance assessment is not limited to structural links but comprises also economic links. From that paragraph it can further be understood that barely the anticipation of competitors' reaction is needed to establish collusion. This complies perfectly to the economic concepts of oligopoly and tacit collusion as introduced above (chapter 4).

Finally, paragraphs 276 and 227 specify the concept of collective dominance in a crucial way. The economic approach suggested by the game theory is expressed in these two paragraphs: The members of an oligopoly are able to discern each other's decisions and they have the possibility of taking necessary retaliatory measures (paragraph 227). Moreover, special links are not necessary for the establishment of collective dominance, it may be already sufficient, that the oligopolists because of their interdependence are able to anticipate each other's behaviour and thus able to tacitly collude (paragraph 276). All in all, the *Gencor v. Commission* judgement is a step ahead in the development of the concept of collective dominance and that is why it also has been welcomed by legal scholars.[143]

5.6 Air Tours/First Choice[144]

The notified merger *Air Tours/First Choice* has been blocked by the Commission. This case is interesting because of two aspects. First, in this case the Commission extends the concept of collective dominance from including duopoly[145] to a merger reducing the

[141] Korah, as note 14 above, p. 101.
[142] *Gencor/Lonrho*, as note 134 above, para. 104-105.
[143] Korah, as note 14 above, p. 342.
[144] *Air Tours/First Choice*, as note 9 above.
[145] In *Nestlé/Perrier*, *Kali und Salz* and *Gencor v. Commission* the merger would have led to a duopoly in the post-merger market. In *Price Waterhouse/Coopers & Lybrand* the merger was cleared since there would have been four major market players after the merger.

major firms on the market from four to three. Second, the nature of the market involved gives rise to a special argumentation on firms' strategic behaviour.

After the merger there would have been three major vertically integrated firms left, *Air Tours/First Choice*, Thomas Cook and Thomson. The three firms would have held over 80 percent of the U.K. short-haul package holiday market.

The market at issue is the U.K. short-haul package holiday market. Low barriers of entry, high market shares volatility, non-homogenous products, importance of vertical integration and marketing methods, comprising considerable price discounts when the departure dates are approaching, are specific for that market and influence consequently the appraisal of collective dominance.[146] High market shares volatility may indicate that there is no persistent leadership and that market positions are changing fast. Vertical integration both upstream into charter airlines and downstream into retail distribution represents a main competitive advantage in the market, making it more difficult for small non-integrated market players to compete. The products in the market are not homogenous since there is a variety of travel destinations, trip lengths, travel standards, types of hotels, additional services etc.

A main characteristic of the short-haul package holiday market is that firms' decisions are referring to two different periods: a planning stage and a selling season. During the planning stage firms choose their capacity for the following 12-18 months without knowing demand. Capacity refers mainly to seats on charter flights and rooms in hotels. After the planning stage, the selling season follows. In this period, the exact level of demand is disclosed and market prices are chosen on the basis of the demand. Thus, under the selling season, firms' decisions are influenced by the capacity constraints determined in the previous planning stage. "Tour operators need to operate at high levels of capacity utilisation … in order to maintain profitable short-haul operations. Matching capacity and demand is therefore critical to profitability, especially since package holidays are perishable goods - given package loses all its value unless it is sold before its departure date."[147] In order to match capacity with demand, considerable price discounts or even price wars occur when the departure dates are approaching.

Relevant Question
The Commission gave an affirmative answer to the question whether the leading firms in the post-merger market would be likely to hold a collective dominant position. In that context, the Commission argued that the crucial question concerning the market players' activities in the short-haul package holiday market is how much *capacity* is put on the market. Price competition in order to attract additional customers is unlikely to be attractive since firms cannot change the chosen capacity during the selling season and therefore firms are unable to serve more customers than they have capacity. Consequently the collusive outcome is likely to occur on capacity competition during the planning season. Profits are directly related to the level of capacity and the coordination on price is unnecessary.[148]

[146] Motta, as note 5 above, p. 204.
[147] *Air Tours/First Choice*, as note 9 above, para. 60.
[148] Ibid, para. 91.

Air Tours on the contrary, claims that collective dominance is not likely to occur after the merger, since tacit collusion is unlikely to become effective in the present case because not all of the following four conditions are fulfilled:

1. There is little to gain from deviation and a lot to lose from being punished, i.e. where there is a small number of effective competitors.
2. An agreement is easy to reach and deviation can be detected, i.e. when demand is predictable and when products are homogenous.
3. Effective punishment can be implemented immediately.
4. Punishment is not costly for those implementing it. [149]

Regarding punishment *Air Tours* argues that since capacity can only be increased marginally during the season, firms cannot be punished immediately through a large increase in capacity. Neither punishment through price competition nor through a large increase in capacity for the following season is likely to take place. Price competition is not really effective since the firms cannot serve additional customers and punishment in the following season will inflict a lower cost due to discounting and will no longer have a clear association to the deviation. [150] Somehow surprisingly, the Commission responds to Air Tours' statements that a strict punishment mechanism does not necessarily have to be proved:

> In particular it is not necessary to show that there would be a strict punishment mechanism. [151]

This surprising statement does not seem to fit into the argumentation of the previous cases, especially compared with the judgement in *Gencor/Lonrho*, where the possibility of punishment was considered. Instead, the Commission formulates what seems to be a new question:

> What matters for collective dominance in the present case is whether the degree of interdependence between the oligopolists is such that it is rational for the oligopolists to restrict output, and in this sense to reduce competition in such a way that a collective dominant position is created. [152]

The relevant question in this case, differs apparently from those in the previous cases. According to the version of the relevant question in this decision, it seems to be sufficient for collective dominance that oligopolists 'act independently in ways which reduce competition'. In other words, tacit collusion with its inherent punishment mechanism in order to sustain the tacit collusion is obviously not considered to be the core element of the concept of collective dominance. The question which follows is, if this is true generally spoken and how this would make sense economically. I will come back to this question.

Criteria Applied in the Decision

Of course the criteria set out in the 'checklist' were assessed in the Air Tours/First Choice case, too. The factors taken up for investigation were

[149] Ibid, para. 51, 148.
[150] Ibid, para. 149.
[151] Ibid, para. 55, 150.
[152] Ibid.

- Product homogeneity [153]
- low demand growth [154]
- low price sensitivity [155]
- similar cost structures [156]
- transparency, interdependency and commercial links [157]
- barriers to entry [158]
- no buyer power [159]
- past competition [160]

Two Economic Tests
Furthermore the Commission applied the Herfindahl-Hirshmann index (HHI), an economic test for the impact of a merger on the market concentration. The HHI is used in the United States. Instead of merely looking at the combined market share of the leading firms, the HHI is calculated by summing up the squares of the individual market shares of all market players. Thus, HHI takes account of an overall market concentration. An HHI below 1000 in regarded as “unconcentrated”, an HHI between 1000 and 1800 is considered “moderately concentrated” and the HHI in a “highly concentrated” market is above 1800. In this case the HHI is estimated to be 1700 before the merger and will increase by more than 450 points through the merger. The Commission points out that this increase measured by the HHI is a substantial increase, as already the estimated combined market share shows, increasing from 70% pre-merger to 83% post-merger.[161]

The Eckbo-Stillman Test is another economic test which evaluates market developments by analysing the movement of share prices. The share prices will fall if the merger is considered by the market players as enhancing efficiency of the merging firms. The price fall indicates that there now exists a stronger competitor on the market implying that the merger is pro-competitive. If, on the other hand, a collective dominant position is created by the merger, all major market players will profit of the merger and share prices will therefore increase. Invoking this economic test, Air Tours points out that the share price of Thomson, one of the major market players in the relevant market, fell significantly after the announcement of the merger. However, the Commission has not accepted this evidence in the *Air Tours/First Choice* case based on the reactions of the stock market.[162] Since the Commission’s work is based on a case-by-case approach, it is difficult to say if the Eckbo-Stillman Test generally is rejected or only in the Air Tours/First Choice case.

Does the Argumentation in the Decision Make Sense Economically?
The Commission’s argumentation concerning collective dominance in the *Air Tours/First Choice* case seems to be reasonable in respect to various aspects. The term

[153] Ibid, para. 88 et seq.
[154] Ibid, para. 92 et seq.
[155] Ibid, para. 98 et seq.
[156] Ibid, para. 99 et seq.
[157] Ibid, para. 102 et seq.
[158] Ibid, para. 114 et seq.
[159] Ibid, para. 124 et seq.
[160] Ibid, para. 128.
[161] Ibid, para. 139. For a more in detail explanation see Ysewyn/Caffarra as note 126 above.
[162] *Air Tours/First Choice*, as note 9 above, para. 154-155.

'reasonable' is used with reference to the concept of collective dominance as it has been developed in case-law and as to its economic background which has been explained above.

First, the Commission's reasoning concerning the high variability of market shares over time in the short-haul package holiday market makes obviously sense. The fact that the market has changed its shape so fast in the past does not necessarily mean that the same type of changes might occur again. Thus it was economically rational of the Commission not to attach any importance to this fact as an evidence for the pro-competitiveness of the post-merger market.[163]

Second, it is logical how the Commission evaluates the effects of the following factors on the post-merger market: remaining competitors[164], barriers to entry[165], vertical integration and asymmetry[166]. These are crucial factors which the Commission considered being conducive to collective dominance. Regarding barriers to entry and vertical integration, collective dominance becomes more likely because these two factors interact. Barriers to entry will mainly arise since it is impossible for non-integrated small businesses to compete with the leading firms which are integrated.

So long, there is no problem in following the Commission's argumentation. However, as to the factor of demand volatility[167] it is not quite clear why "the volatility of demand makes the market more conducive to oligopolistic dominance". Logical would be, that demand volatility causes the opposite effect, namely competitive markets, since it appears from a common economic understanding that if demand would *not* be volatile, firms would be able to sustain full collusion both in their capacity and price choices.

The major difficulty in the case turned out to be the Commission's statement in paragraph 55 saying that "it is not necessary to show that there would be a strict punishment mechanism". Theoretically, collusion on capacities is possible, especially in this industry where capacity decisions are reviewed periodically and where these decisions are so essential for the profit which can be gained in the selling season. Further, there is no need for collusion in both capacity and price decisions at the same time.[168] Thus, in theory collusion on capacity is possible in every "planning season", according to a mechanism similar to an infinitely repeated game. A decision blocking or clearing a merger needs however to build on the evidence that the theoretical scenario of collusion is likely to be found in the post-merger market. And here is the difficulty of the decision. How can a mechanism of collusion be sustained if firms don't have to fear any disadvantages when deviating from it. A strong incentive to collude is therefore not enough; a credible punishment mechanism is essential in order to sustain collusion. But that is precisely what the Commission explicitly has denied in paragraph 55.

So how to react on the *Air Tours/First Choice* decision? Was the Commission just confused when putting down its economic arguments as for example regarding the interpretation of demand volatility, and one should therefore generously overlook this

[163] Ibid, para. 72, 133-134.
[164] Ibid, para. 140-141.
[165] Ibid, para. 114 et seq.
[166] Ibid, para. 99.
[167] Ibid, para. 97.
[168] Motta, as note 5 above, p. 205.

mistake, like Motta does?[169] Or does one have to take the Commission's statement more cautiously like Valentine Korah does in saying: "The decision has left current practice in confusion. We no longer know on what theory the Commission is working and it is impossible to advise firms whether mergers have a good chance of being cleared." [170] Or finally, has the Commission extended its concept of collective dominance now embracing more than tacit collusion after the merger, i.e. including situations where "the degree of interdependence between the oligopolists is such that it is rational for the oligopolists to restrict output, and in this sense to reduce competition in such a way that a collective dominant position is created. [171]"? A discussion about this will be developed in chapter 6.

5.7 Alcan/Pechiney/Alusuisse[172]

Alcan/Pechiney and *Alcan/Alusuisse* were two proposed mergers in the aluminium sector. While *Alcan/Alusuisse* was cleared with conditions and obligations, the merger *Alcan/Pechiney* was blocked mainly due to problems of single dominance. However, an interesting question concerning the problem of collective dominance came up in the *Alcan/*Pechiney case. The Commission stated that an existing structural link to a competitor could serve as a *retaliation* mechanism.[173]

The decision in *Alcan/Pechiney* gives rise to the question whether 'retaliation measures' generally are necessary for the establishment of collective dominance. After *Air Tours/First Choice* the Commission's statement in *Alcan/Pechiney* about punishment appears more like a decision due to the case-by-case approach and less as a refinement of the concept of collective dominance.

5.8 Veba/Viag[174]

The Commission cleared the merger between VEBA and VIAG under stringent conditions. The merged entity would have formed a duopoly together with another entity on the German electricity market from the interconnected grid. The commitments were that the two largest groups in the relevant market should sever the main links between them. Resulting from this commitment, there would be created a competitive constraint on the leading firms by two other firms. Thus the risk of the two largest undertakings forming a duopoly in the post-merger market was eliminated.

In this case the structural approach was decisive. The Commission has proved that the market structure after the merger would provide incentives for the two leading firms to collude tacitly. In particular the factors of product homogeneity, transparency in the market, symmetric cost structures due to a similarly composed stock of power stations and some jointly operated large power stations, many interrelationships between VEBA/VIAG and RWE, low growth in demand and low price elasticity supported the Commission's finding that there is a risk for collective dominance in the post-merger

[169] Motta, as note 5 above, p. 206, note 42.
[170] Korah, as note 14 above, p. 315.
[171] *Air Tours/First Choice*, as note 9 above, para. 55, 150.
[172] M 1663 *Alcan/Alusuisse* [2000] OJ C 274.
M 1715 *Alcan/Pechiney* [1999] OJ C 274.

[173] Competition Report 2000, para. 263-264.
[174] M 1673 *Veba/Viag* [2000] OJ C 371.

market. In other words a punishment mechanism in order to ensure the sustainment of the collective dominance was not essential in this case.

5.9 Rexam/American National Can[175]

The merger between the beverage cans producers Rexam and American National Can was cleared due to conditions. The merger would have created a duopoly in the two relevant markets between the merged entity Rexam/American National Can and another leading firm. The factors due to which the duopoly would have arisen, were the duopoly members' combined market share amounting to 80%; the symmetries in their market shares, cost structures, capacity and excess capacity; the low growth trend in the market; the product homogeneity; the transparency in the market; the mature technologies and the lack of a potential competitive constraint.

The condition by which the merging firms got approved the merger, was to divest two of their plants to an independent third party. As a consequence to this divestment, the Commission stated that there would be asymmetries between the members of the potential duopoly. These asymmetries in return would despite the other supporting factors destroy the sustainment of a tacit collusion in a duopoly. On the other hand, the Commission concluded that collective dominance can be created and sustained even in a bidding market, i.e. a market where business is done by way of frequent tenders. In *Pirelli/BICC*[176] the Commission came to the same conclusion of the possibility of a persistent collective dominance in bidding markets. In this case, the sustainment of the alleged tacit collusion after the merger was essentially relied on. Like in the cases before, I do not dare to draw general conclusions from this case. In this case the factor of the sustainment of collusion seems like the decisive factor for clearing the merger. Neither in this case were the punishment mechanisms necessary for the sustainment of tacit collusion.

5.10 Outokumpu/Avesta Sheffield[177]

This merger of Outokumpu Steel and Avesta Sheffield, two leading producers of stainless steel products in Europe, has been cleared like the majority of merger cases, however without any commitment. The factors in this case pointed in two opposite directions and after the pros and cons of the likelihood of a collective dominance carefully have been weighed, the Commission comes to the decision that despite the high concentration, the transparency of the market, the high entry barriers and the high capacity utilisation, tacit collusion would not be possible, because of the products' high growth rate of over 5% a year and the asymmetries in the firms' cost structures. Interesting in this case was the weighing of the factors, but punishment was neither here regarded to play an interesting role.

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[175] M 1939 *Rexam/American National Can* [2000].
[176] M 1882 *Pirelli/BICC* [2000].
[177] M 2180 *Outokumpu/Avesta Sheffield* [2000] OJ C 324.

6 Commentary on the Analysis of the Case-Law

Chapter 6 aims to deliver a comparison of the main features in the case-law which has been analysed above. This comparison is related to the 'relevant question' and to certain economic factors which the Commission and the Court use in the assessment of collective dominance. Further, chapter 6 broadly discusses the number of oligopolists constituting a collective dominant position, efficiency considerations in European competition law, particularly in merger control and the guidance which the Commission gives beyond its case-law regarding the collective dominance assessment. Finally, the significant issue of economics in competition law, especially in the appraisal of collective dominance will be dealt with. Thus, the fourth question which has been introduced in chapter 1 will partly be taken up: How is legal certainty balanced against economic flexibility? The second part of the fourth question, "Is increased legal certainty possible?", will be considered in chapter 7.

6.1 The Relevant Question

The economic point of view in respect to the appraisal of collective dominance is that co-ordination between firms in a market will be more easily *sustained* if deviations from an agreed path are more likely to be 'detected' by the other firms, and these have the means to 'punish' the deviating firm immediately and effectively. In order to determine the likelihood of such a collusion, economic factors which enhance the probability of punishment and reduce undetected deviations have been pointed out in the economic literature.[178]

Merger control is however regulated by law and the appraisal of collective dominance has to comply with a legal concept. That means that it is the case-law which is conclusive and not what appears to be rational economic theory. It is however no secret that the legal concept of collective dominance is controversial and that it is still being developed. In this chapter, the main features about how the concept of collective dominance has been developed or altered from case to case will be discussed. The key elements of the concept of collective dominance can be summarized in what I call the 'relevant question'.

In the very first case concerning collective dominance, *Nestlé/Perrier*, the relevant question has been put as how likely or how easy it will be for oligopolists to collude or to avoid competition among themselves after the merger. The elements which can be found in this question are "collusion" and "avoid competition", the latter as an alternative way of behaviour to collusion. Looking at the case through purely 'economic glasses', one notices that the aspect of 'retaliation' is missing.

A great deal of attention was paid to the *Kali und Salz* case because it was the first time the ECJ was taking up a case regarding collective dominance and because the ECJ was laying much weight on the economic analysis. Despite that, the judgement did not advance the concept of collective dominance significantly, that happened to a certain extent in the cases thereafter. The relevant question which can be derived from the *Kali und Salz* case is whether effective competition will be significantly impeded in the post-

[178] Ysewyn/Caffarra, as note 126 above, p. 469.

merger market because of the merger, in particular because of special links which exist between the oligopolists, enabling them to adopt a common policy on the market and act to a considerable extent independently of their competitors, their customers, and also of consumers.

The key elements in the concept of collective dominance in *Kali und Salz* are thus, "common policy through special links" and the ability of the firms to "act to a considerable extent independently from their competitors and customers". Except from the "special links", the relevant question in *Kali und Salz* does not alter from the concept of collective dominance as it has been developed so far; taken for granted that the criteria " they act to a considerable extent independently from their competitors and customers" is related to the *collective* behaviour of the members of the alleged collective dominant position and that they are no real competitors in their mutual relationship, but instead either collude with each other or avoid competition among each other (the key elements in *Nestlé/Perrier*).

The punishment mechanism was neither taken into account in *Kali und Salz*. Since the Commission has considered 'punishment measures' in the *Gencor v. Commission* case, an aspect of the *Kali und Salz* case shall be brought to notice in respect to the concept of collective dominance *including* the necessity of 'credible punishment mechanisms'. The aspect I am referring to is the ambiguity of the factor 'lack of excess capacity' which already has been described in the previous chapter. Since this factor may indicate both an incentive to collude but an incapacity to retaliate at the same time,[179] the relevant question as it has been put in *Gencor v. Commission* becomes very hard to answer if not impossible. A difficult situation which is probable to come again. Then it will be interesting to see whether the Commission ignores the ambiguity of the factor 'lack of excess capacity' or whether it does not. In the latter case it will be in turn interesting to observe whether the Commission is going to alter the concept.

The *Price Waterhouse/Coopers & Lybrand* case brought a new statement in respect to the concept of collective dominance. This new statement takes up the element of the "number of members in a collective dominance" which unlikely could be more than three or four according to the Commission. [180] In other respects the relevant question is quite the same as in previous cases, including the elements of "the feasibility of parallel behaviour" and "the incentives to engage in parallel behaviour", but it is neglecting to take account of retaliatory measures being the basis for the sustainment of the collusion.

In contrast to all the previous cases, *Price Waterhouse/Coopers & Lybrand* , *Kali und Salz* and *Nestlé/Perrier*, in *Gencor v. Commission* the concept of collective dominance finally appears to have accepted the economic rationale about oligopolies illustrated through the game theory. All the elements of such an approach have been considered in the case: the likelihood of major market players monitoring each other's behaviour, detecting deviation from tacit collusion and retaliating against deviating firms. Beyond this, the concept of collective dominance seems to have been developed even regarding two other aspects. These were "the anticipation of competitors' reaction" as fully sufficient for (tacit) collusion and the recognition of firms' strategies which in certain market situations recognize that collusion is "a more rational strategy than competing with each other".

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[179] Zekos, as note 119 above, p. 40. Venit, as note 117 above, p. 1114.
[180] *Price Waterhouse/Coopers &* Lybrand, as note 128 above, para. 103.

Thus the concept of collective dominance formally seems to have been considerably extended in *Gencor v. Commission* regarding the links between the alleged “collective dominance-firms”. In reality, the ECJ never ruled explicitly that special links are an indispensable prerequisite. So, maybe the ECJ already had worked on this assumption but in the *Kali und Salz* case it was of prior importance to establish a certain legal standard of proof in general.

As to the economic rationale of the game theory, it is true that the CFI’s argumentation perfectly follows that rationale: because of the price transparency the oligopolists were found to be able to discern each other’s decisions. Moreover, they were considered being capable of taking the necessary retaliatory measures. The existence of these two aspects, the likelihood of undetected deviations and the likelihood of retaliation, creates the risk of a sustainable collusion in the post-merger market.[181] However, there is no general statement about the general validity of this approach in the judgement. On the opposite, this approach was only used for the evaluation of the significance of price transparency in this case. Thus, the concept of collective dominance may have changed to a new approach, but that should be taken very cautiously since additionally the Commission is not bound of its decisions in prior cases.

The question whether the Commission has adopted the game theoretical approach with its three elements of monitoring decisions, detection of deviations from tacit collusion and credible punishment mechanism may be decisive in some cases. This was the case in *Air Tours/First Choice*.

As it has been taken up in the analysis above, the merger in the Air Tours/First Choice case was blocked because of the likelihood of tacit collusion in reference to the firms’ capacity decisions. Thus for the first time, the Commission recognises that anti-competitive parallel behaviour can be found not only in respect to price competition but also concerning firms’ capacity. So, the relevant question does not only refer to price competition. This constitutes certainly a refinement of the concept of collective dominance compared with the previous cases. This refinement obviously was contingent upon the special way the short-haul package holiday market is working. In none of the previous cases capacity decisions played such a crucial role; maybe in *Gencor v. Commission* the question what would happen to the expansion of capacity after the merger was discussed, but that capacity decision was of a completely different kind compared with that in *Air Tours/First Choice*. Regarding the *Gencor v. Commission* case, Caffarra/Kühn state that capacity expansions are lumpy decision, large and infrequent, why co-ordination on capacity is generally difficult to achieve.[182]

The likelihood of collusion has been analysed by the Commission in a way that makes sense economically. However, the sustainment of the collusion by the existence of a punishment mechanism is not considered. The Commission derogates from the game theoretical approach which seemingly has been adopted in *Gencor v. Commission* by the CFI. In *Air Tours/First Choice* the Commission states that a strict punishment mechanism does not necessarily have to be proved. So, it is not surprising that the relevant question in this judgement seems to deviate from the ones in previous cases. The key elements in the relevant question are “the degree of interdependence” which

[181] Ysewyn/Caffarra, as note 126 above, pp. 496, 470
[182] Caffarra/Kühn, as note 71 above, p. 358.

leads to a "rational firm behaviour". Neither the elements of "collusion" and "incentives to collude" nor the game-theoretical approach have been considered as necessary elements in *Air Tours/First Choice*, since "what matters" are the elements of "interdependence" and "rational firm behaviour".[183]

I have already pointed out that the question whether the Commission has adopted the game theoretical approach was decisive in the *Air Tours/First Choice* case. The applicant argued according to the game theory that tacit collusion was not possible in this case since credible punishment mechanism were not to be found in the relevant market. These arguments have however been ignored by the Commission, being irrelevant ("what matters is…").

In chapter five the discussion about which significance the relevant question formulated in *Air Tours/First Choice* should be given, has been introduced. I have pointed out three possible interpretations: either taking the judgment verbally as a big change in the concept of collective dominance which however is confusing and incompatible with economic common sense or not taking it verbally and laying weight on economic common sense as it has been developed in *Gencor v. Commission* or finally taking it verbally as an extension of the concept of collective dominance.

It is of course impossible to be certain about what interpretation is the right one. Maybe the best advice one could give to firms is a compromise: Be cautiously and do not expect the Commission to use the game theoretical approach, concentrate on other arguments than the argument of the punishment mechanism, but be prepared on this as well in the event of the Commission using the same approach as in *Gencor v. Commission*.

The advice to the firms is a practical advice which does not represent an academic discussion about how *Air Tours/First Choice* should be interpreted. However, as I can see it, the interpretation of this case cannot lead much more far than the three alternative interpretations I have given, without speculating too much and without using other interpretation methods than the verbal interpretation of the case. In chapter 6.5 I will also consider other statements by the Commission than the case-law on the concept of collective dominance

In conclusion to this chapter, one could say that the concept of collective dominance has been developed and refined in the cases from *Nestlé/Perrier* to *Gencor v. Commission* in a way which in principle is not contradictory. In particular the *Gencor v. Commission* judgement represents a crucial refinement of the concept of collective dominance, implying a strong evidence for the game-theoretical approach. In line with this refinement of the concept, it is difficult to see how the *Air Tours/First Choice* decision should fit in. When adopting a point of view which is evaluating the game theory as the most logical economic basis for collective dominance, one could wonder whether this decision is a relapse from the development until *Gencor v. Commission* or whether *Gencor v. Commission* is an exception in the case-law, since it is the only case where retaliation measures are explicitly referred to.

[183] *Air Tours/First Choice*, as note 9 above, para. 55, 150.

6.2 Factors in the Collective Dominance Appraisal

In this chapter, some main factors of the collective dominance assessment will be discussed broadly with respect to how they are applied in the different cases which have been analysed above. Before this, it might be useful to have in mind some structures containing categories in which the different factors might be divided into. This should help to render the obviously very complex appraisal of collective dominance more easy to take at a glance, not to be satisfied thereby but to have a clearer starting point. Such a categorization does not comply with reality, it is artificial. Therefore it may only cautiously be used as a starting point.

Naturally, there are many ways to systematize the factors in the collective dominance assessment process and everyone has her or his own preferences. But in order to give an idea about how such a systematisation can look like, two different outlines will be represented below. These categorizations are however not meant to represent complete checklists but more an idea about which economic factors do play a role and in which way they are applied and are interrelated with other factors. Clearly the latter aspect cannot be seen in the structured lists but they will be described later on.

As mentioned above, it makes sense to draw a basic distinction between structural and behavioural factors. Additionally, a category for 'firm specific factors could be created:

Structural factors
- degree of concentration
- remaining competitors
- barriers to entry and/or exit
- maturity/stability of markets
- special supplier-customer relationships
- structure of demand/buyer power

Firm specific factors
- price elasticity
- symmetries

Behavioural factors
- transparency (both behavioural and structural factor)
- suppliers' past strategies
- structural links [184]

[184] Venit, as note 117 above, pp. 1120 et seq.

The second systematisation mirrors a logical two-step process investigating the feasibility of the creation of a collective dominant position:

I. Basic market configuration triggering the analysis of collective dominance
   1. Degree of supply concentration
      - Level of concentration
      - Increase in concentration
      - Distribution and stability of market shares
      - Links between suppliers
   2. Basic market conditions
      - Nature of the product
      - Demand conditions

II. Assessment of competition in oligopolistic markets
   1. Market transparency
   2. Structure of leading firms
      - Symmetric and Asymmetric oligopolies
      - Technology and Economics of production
      - Capacity
      - Vertical integration
   3. Structure of demand, countervailing purchasing power
   4. Potential competition
   5. Record of past behaviour [185]

6.2.1 Degree of Concentration

The Commission has measured the market concentration using two different approaches. In *Nestlé/Perrier* and *Kali und Salz* for example, the Commission was looking at the combined market share of the leading firms. In *Air Tours/First Choice* the Commission made use of the HHI index, calculating overall market concentration.[186]

In E.C. merger control there is no presumption of dominance when there is a certain level of supply concentration or any other factor which might indicate the existence of a dominant position. A certain market concentration level normally leads to an in-depth investigation of the case in order to prove a dominant position. In its decisions, the Commission has carried through such in-depth investigations when duopolies' market share exceeded 50 % of the relevant market. In *Nestlé/Perrier* and *Kali und Salz* the leading firms constituting a duopoly held over 60% of the relevant market.

Regarding groups of more than two firms, the Commission has seldom investigated whether they where constituting collective dominance since transparency decreases and the number of members of the group of leading firms enhances competition. *Price Waterhouse/Coopers & Lybrand*, where there would be 5 major market players left has been cleared for that reason. However, the merger in *Air Tours/First Choice* which would have left a leading group comprising three firms in the post-merger market, was blocked.

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[185] Briones, Juan, 'Oligopolistic Dominance: Is there a Common Approach in Different Jurisdictions? A Review of Decisions Adopted by the Commission under the Merger Regulation' in: *ECLR [1995] 6*, p. 334.

[186] For a more in detail description of the HHI see Hildebrand, as note 17, p. 129. See also chapter 5.6 on page 38 above.

The question, how the Commission determines the market concentration, if it looks at the combined market share of the leading firms or if it applies the HHI, can of course not be answered by analysing the cases which have been decided yet. This does however hardly constitute a problem, since the Commission does not use any presumption of dominance in the merger control procedures. The final outcome of a procedure under the Merger Regulation will thus not be prejudiced by a certain concentration level.

6.2.2 Remaining Competitors

In contrast to the assessment of single dominance, where it is analysed whether the actual or potential competitors or customers are able to constitute a sufficient constraint on the leading supplier, the members of the oligopoly are by assumption capable of exerting such a constraint on each other. [187] However, the question whether oligopolists will compete with each other or engage in anti-competitive parallel behaviour (tacit collusion) depends "will be affected by the intensity of competition outside it." [188] Existing or potential competitive constraint by third parties was an essential factor for the clearance of the merger in the *Kali und Salz* judgement. The cases *Veba/Viag* and *Rexam/American National Can* are examples were the merger was cleared due to commitments aiming at creating competitive constraint by third parties.

6.2.3 Barriers to Entry

High entry barriers will enhance the sustainment of tacit collusion between oligopolists, since third parties will not easily penetrate the market and disturb the collusion, e.g. by undercutting the price. It is therefore an important structural factor which however can be interpreted in various ways. In the theoretical discussions, in particular between the Harvard school and the Chicago school, there is no unanimity regarding this factor. [189] In the case-law of E.C. merger control, entry barriers develop from many interacting factors, which are specific to each case. In *Gencor/Lonrho* [190], high entry barriers were found on the following grounds: (i) the oligopolists controlled all economically viable reserves of platinum in South Africa; (ii) mining and refining were capital intensive; (iii) sunk costs were high. These factors were constituting high entry barriers making it unlikely that new market players would enter the market. In *Nestlé/Perrier* [191] high entry barriers on the French market for bottled mineral water were identified due to (i) stagnant growth; (ii) maturity of technology; (iii) strong brand loyalty among consumers; (iv) existing rebate systems that foreclosed access to retailers and wholesalers; (v) high advertising costs.

6.2.4 Maturity and Stability of Markets

Generally, stagnant markets facilitate tacit collusion since there is no incentive for the market players to actively compete for new market shares. Stagnant markets often result

[187] Briones (1995), as note 185 above, p. 341.
[188] M. 580 *ABB/Daimler Benz* [1995] OJ L 11/1.
[189] See chapters 4.2.2 – 4.2.3.
[190] *Gencor/Lonrho*, as note 134 above, para. 154.
[191] *Nestlé/Perrier*, as note 11 above.

from the maturity of the technology in the market like for example in *Gencor/Lonrho*[192], were a technological development of the existing mining and refining technologies was unlikely to take place and the risk for a possible tacit collusion thus was increased.

6.2.5 Special Supplier-Customer Relationships

This factor is a special one which is not present in every case. The relationships comprised by this factor are special in the way that they for example include the need for a close cooperation between the supplier and its customer. Through this connection between the supply side and the demand side, customer dependence and a de facto sharing of the market shares is likely to occur. Consequently, competition between the market players will be reduced and the incentive to tacitly collude will increase. Cases in which this factor was considered were *SNECMA/TI* and *DuPont/ICI*.[193]

6.2.6 Structure of Demand and Buyer Power

Demand and buyer power can be fragmented and weak. However, the structure of demand and buyer power can also be such as consisting of powerful and concentrated customers which are capable of forcing their suppliers to compete with each other, i.e. to deviate from their anti-competitive parallel behaviour. Even the order of a single customer can be so important, that it puts pressure on each oligopolist to make a competitive offer before the other oligopolists. [194] Customers' buyer power thus offsets to a certain extent the factors facilitating tacit collusion. Therefore it is also called the 'customers' *countervailing* power'. Three effects of the customers' *countervailing* power' can be generally pointed out: it may induce entry of new firms, impede integration and motivate deviation and detection from tacit collusion.[195]

In the assessment of the case *Gencor/Lonrho*, the absence of countervailing purchasing power was considered significant in the context of the following factors: (i) low discount levels; (ii) the existence of contract clauses which prevented the re-sale without producer authorisation; (iii) there were no substitutes for the product; (iv) there were a large number of downstream customers.[196] In *Nestlé/Perrier*[197] countervailing purchasing power has not been concluded despite a high concentration of buyer power.

6.2.7 Price Elasticity

Usually, competition is based on prices. If demand is price inelastic the incentive for market players to collude is higher than if demand is price elastic, since oligopolists are more likely to suffer from price competitions when demand is price inelastic.[198] By jointly increasing the prices in a price inelastic market, oligopolists will increase their revenues and their profits.[199] In *Nestlé/Perrier*, the inelastic prices prevailing under a long period were considered to significanty facilitate the likelihood of collusion on

[192] *Gencor/Lonrho*, as note 134 above, para. 152 et seq.
[193] M. 368 *SNECMA/TI* [1993] OJ C 42, para.26 et seq.
M. 214 *DuPont/ICI* [1993] OJ L 7/13, para. 29, 43.
[194] Briones (1995), as note 185 above, p. 345.
[195] Ibid.
[196] *Gencor/Lonrho*, as note 134 above, para. 150.
[197] *Nestlé/Perrier*, as note 11 above.
[198] Briones (1995), as note 185 above, p. 340.
[199] Ibid.

prices.[200] In the *Gencor/Lonrho* case the CFI stated that the suppliers would loose by engaging in price competition due to the price inelasticity of platinum.[201]

6.2.8 Symmetries

The factor of symmetry is related to the firms' cost structures, capacities and elasticity of demands. This factor was decisive for the conclusions in the *Kali und Salz* judgement. However it is not easy to handle the factor of symmetries, since it may have ambiguous effects depending on its interaction with other factors. [202] Thus, symmetries is a factor which has to be evaluated in the context of the other economic factors.

6.2.9 Transparency

A transparent market is a very important condition for the feasibility of tacit collusion. The more transparent the market is, the easier it is for the firms to mutually monitor their market behaviour and to collude on this basis. Seen from a game-theoretical perspective, transparency in the market also contributes essentially to the sustainment of collusion since the functioning of punishment mechanism is facilitated (deviation from collusive behaviour is easier to detect and it is more obvious when a certain measure aims to discipline a deviating oligopolist).

Transparency may appear and become important in different forms. In *Nestlé/Perrier* transparency was due to the firms' practices of among others publishing price lists. [203] In this form, transparency is a behavioural factor. Transparency may also be a structural characteristic. The commodity nature in *Gencor/Lonrho* for example was considered enhancing price transparency.[204]

6.2.10 Suppliers' Past Strategies

Regarding the evaluation of this factor, one has to be especially cautious, since past strategies are, as the term already says, *past*. They may only be attached importance if the also play a role in the post-merger market. This might seem quite logical, but a prospective analysis of the suppliers' past strategies' effect in the post merger market is not easy to prove. In the *Kali und Salz* judgement the Commission's evaluation of this factor was quashed, since the Commission did not sufficiently prove the effects of such a behaviour in the post-merger market.[205] On the other hand, in the *Nestlé/Perrier* decision the oligopolists' past behaviour clearly played a decisive role for the finding of a collective dominance.[206]

6.2.11 Links between the Firms

Structural links played an important role in the *Kali und Salz* case. However, the decisive judgement concerning this factor constitutes the judgement *Gencor v.*

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[200] *Nestlé/Perrier*, as note 11 above, para. 124.
[201] *Gencor/Lonrho*, as note 134 above, para. 149.
[202] See chapter 5.
[203] *Nestlé/Perrier*, as note 11 above, para. 62, 123.
[204] *Gencor/Lonrho*, as note 134 above, para. 145, 156.
[205] *Kali und Salz*, as note 12 above.
[206] *Nestlé/Perrier*, as note 11 above.

Commission, in which the CFI explicitly stated that links between the firms are no necessary criteria in order to establish collective dominance. Moreover, the CFI stated in the same judgement that links do not have to have the shape of structural links. It is sufficient with a relationship of economic interdependence between the leading firms economic links. Links may also be found in a relationship of economic interdependence between the leading firms. [207]

In order to get a merger approved, firms often accept conditions regarding existing links, such as to severe existing links or to divest joint activities. Cases which have been cleared that way are for example *Veba/Viag*[208] and *Rexam/American National Can*[209].

6.2.12 Weight of Various Factors

In this essay, a central aspect is the case-by-case approach of the Commission and the issue whether it nevertheless is possible to learn from one case how future cases could be treated. The significance of economic factors can however not be generalised, since these factors may differ significantly in each individual case. What can be generalised to a certain extent is a common economic understanding of the problem of oligopolies. In the scope of this understanding, the importance of economic factors varies.

Even though one cannot and must not abstract the significance of the economic factors, some factors like the level of market concentration, the maturity of technology, the prospects of demand and the transparency of the market are typical features in the collective dominance assessment.[210] But typical features may not be judged having a typical effect in a certain market. What is decisive is the interaction of the economic factors as a whole in a certain market and taking account of a common economic understanding. Thus, even mergers in highly concentrated markets can be approved, like for example in *Bosch/Allied Signal*[211] where the Commission cleared a concentration with duopoly shares of 80%.

6.3 Number of Oligopolists

The question about how many firms are likely to constitute a collective dominant position according to the concept of collective dominance is interestingly enough not a criteria in the checklist and is thus not one of the factors which the Commission regularly examines. Nevertheless it is a fundamental question and after having already observed its significance in chapter 5, it will be discussed in this chapter.

Regarding the *Kali und Salz* case, Ysewyn and Caffarra notice the Commission's tendency to interpret collective dominance as duopoly. [212] This tendency in the *Kali und Salz* case might be not obvious for all, but it becomes apparent in the *Price Waterhouse/Coopers & Lybrand* decision, where the Commission states that oligopolies involving more than three or four suppliers are unlikely. This issue is taken up again in *Air Tours/First Choice*, where an oligopoly involving three firms was found to give rise

[207] *Gencor/Lonrho*, as note 134 above, para. 104-105. See also the analysis in chapter 5.
[208] *Veba/Viag*, as note 174 above.
[209] *Rexam/American National Can*, as note 175 above.
[210] Briones (1995), as note 185 above, p. 347.
[211] M. 726 *Bosch/Allied Signal* [1996].
[212] Ysewyn/Caffarra, as note 126 above, p. 470.

to collective dominance. According to some legal scholars, *Air Tours/First Choice* represents “the most significant development in E.C. merger control since the adaptation of the Regulation itself” [213]. Can we now, after this decision, assume that a concentration of three firms can lead to collective dominance, but in contrast to that this will not occur with four or five firms?

In other words, can we on the basis of these cases, especially on the basis of *Price Waterhouse/Coopers & Lybrand* and *Air Tours/First Choice*, carry out the following calculus: the common denominator of “more than three *or* four firms are *un*likely to constitute a collective dominance”[214] and “three firms are *likely* to constitute a collective dominance”[215] is equal “with three firms are *likely* to constitute a collective dominance but *not* four”?[216] Of course this purely formal way of reasoning is an exaggeration, but it may build the foundation for how the case-law statistically will most likely develop. Thus, this is one way of making case-law more predictable.

Another way of rendering merger control more foreseeable would be to simply establish a legal definition on how many firms usually might form a collective dominance. In addition, there could be left some room for exceptions in cases where the definition would lead to unreasonable results. Legally, such a definition is certainly of advantage since it is enhancing legal certainty. Economically, unreasonable results can be avoided by applying the exception. [217] The main purpose of this essay is however not to discuss how legal rules should look like but to analyse what the legal rules are and how they are applied. Therefore I will not discuss the possible legal definition any further.

To sum up, the Commission has a tendency of adopting a duopoly approach in the merger control; but at the same time it is very likely that three firms might constitute a collective dominance, whereas this is not true for four or more firms. However, despite this knowledge about the probability of different results, there is more uncertainty than certainty about the way the Commission eventually will decide, in particular regarding cases with three or four leading firms in the relevant market. Here, especially one of the overarching principles in E.C. merger control is true: the decision will depend on the specific situation in every single case.

6.4 Economic Efficiency Considerations

The foremost rationale of competition law is its connection to economic efficiency. [218] Therefore, competition law aims to protect and to enhance economic efficiency, by

[213] Cook/Kerse, as note 4 above, p. 173.

[214] *Price Waterhouse/Coopers & Lybrand*, as note 128 above.

[215] *Air Tours/First Choice*, as note 9 above.

[216]

Price Waterhouse/Coopers & Lybrand	*Air Tours/First Choice*
5 => unlikely	5 => unlikely
4 => *likely*/unlikely	4 => unlikely
3 => *likely*	3 => *likely*
2 => *likely*	2 => *likely*
1 => *likely*	1 => *likely*

[217] Ysewyn/Caffarra, as note 126 above. See also in the analysis of Kali und Salz (chapter 5.3).

[218] Koch, as note 89 above, p. 35.

means of self-regulation of the market or by means of measures prohibiting anti-competitive behaviour, i.e. behaviour which impedes effective competition.

The corresponding fundamental rules in the E.C. Treaty embracing the rationale of the competition law are Articles 2 and 3. In Article 3 (g) the free competition is set out as an interim aim in order to achieve the goal of a harmonious, balanced and sustainable development of economic activities in the European Community set out in Article 2. The main Community goals of a common market and an economic monetary union (Article 2) are of course based on a market with a free and effective competition as well. Finally, Article 2.1(a) of the Merger Regulation states that the Commission in its merger control has to take into account "the need to maintain and develop effective competition within the common market".

Effective competition certainly may bring about economic efficiency, but is not synonymous with it. Economic efficiency is defined as the situation when resources are not wasted. Furthermore, economic efficiency occurs only where both productive and allocative efficiency are at hand.[219] Efficiency considerations are neither explicitly named nor denied in the Merger Regulation. Consequently, it is not clear that efficiency gains can be excluded from the Merger Regulation. Motta argues that: "[…] what the '*travaux préparatoires'* of the Merger Regulation show is that social, political and industrial policy arguments may not be used in the assessment of mergers. Since efficiency gains are a key aspect in determining the *economic* welfare impact of mergers, we can see no contradiction between the spirit of the legislators and the use of efficiency defence."[220] Since the competition rules base on the rationale of economic efficiency, I can see a strong evidence therein that economic efficiency implicitly is covered by the European competition law and thus there is no need to rely on the 'travaux préparatoires' which are anyway of low dignity in European Community Law.

Economic efficiency generally is a central issue in competition law. Formally, this is however not true for E.C. competition law so far. Thus there are the problems that the Merger Regulation on the one hand does not render the possibility to clear mergers which enhance economic efficiency and on the one hand does not prohibit mergers which are detrimental to economic welfare when they do not lead to a dominant position.[221] Despite this, the Commission has not explicitly applied any efficiency gains in its decisions so far. [222] Therefore it would be too courageous to give this idea more significance than merely to test it on a case, see how it works and to keep this in the back of ones head. Maybe some day, it will serve the practitioner trying to evaluate the outcome of a merger decision as a reflex reaction pointing out the possibility of such a strategy by the Commission, although no other factors clearly point in that direction.

A suitable case for such a test seems to be the *Air Tours/First Choice* case, since the Commission's decision in this case deviates considerably from the previous case-law. The *Air Tours/First Choice* case may give rise to the questions whether efficiency considerations could have played a role in this case and whether the deviation from previous case-law can be explained by such considerations. In the following I will list

[219] Ibid, p. 41.
[220] Motta, as note 5 above, p. 203.
[221] Ibid, p. 202.
[222] Ibid, p. 203.

factors from the case which could constitute arguments supporting or arguments excluding an explanation based on economic efficiency considerations.

Firstly, in the *Air Tours/First Choice* decision the Commission explicitly has denied the necessity of a credible punishment mechanism in order to prove collective dominance.[223] This denial, as I have pointed out above, does not make much sense economically, because a mechanism of collusion hardly can be sustained if firms do not have to fear any disadvantages when deviating from tacitly agreed behaviour or anti competitive parallel behaviour. So, maybe the only explanation could be traced back to economic efficiency considerations.

Secondly, efficiency gains were unlikely to result from the merger *Air Tours/First Choice*: "[…] the merger is only expected to lead to overall synergies of less than 1% of the overall costs of the combined entity. Furthermore, the cost savings mostly relate to overhead and other fixed costs."[224] Seen in the context of the fact that the relevant market already was highly concentrated, a fact that also was emphasized by the Commission in the Competition Report[225], the Commission may have wanted to prohibit the merger.

However, there is a third factor which makes it difficult for the Commission to block the merger: the characteristics of the relevant market. Collective dominance through tacit collusion or anti-competitive parallel behaviour was difficult to prove in the U.K. short-haul package holiday market with its specific characteristics, e.g. the high volatility of market shares and the capacity constraint.

Finally, the Commission is not expressly entitled by the Merger Regulation to take efficiency gains into account, although it would make sense. Additionally there is a strong willingness to take an teleological approach to E.C. competition law, as for example became clear in the *Kali und Salz* judgement.[226]

From these arguments it appears not unlikely that efficiency gains might have played an important role in the *Air Tours/First Choice* case.

To sum up, the objectives of E.C. competition law are many and diverse, they are "[…] economic, political and social"[227]. Consequently, there are various alternatives to explain the *Air Tours/First Choice* case. Some of them have already been taken up in the discussions in chapters 5.6 and 6.1. In this chapter, the discussion led to the result that economic efficiency considerations could make sense, however only of marginal importance so long.

6.5 Guidance by the Commission beyond Case-Law

In the conclusions of chapter 6.1 the question was posed as how the decision in *Air Tours/First Choice* should be interpreted. By purely trying to interpret the judgement literally a satisfying answer to the question cannot be found, since assumptions have to

[223] *Air Tours/First Choice*, as note 9 above, para. 150.
[224] Ibid, para. 99, 146.
[225] Competition Report 1999, p. 52.
[226] Venit, as note 117 above, p. 1102.
[227] Competition Policy Newsletter, May 1993.

be made in order to be able to point out the right interpretation. In this chapter I will go beyond the verbal interpretation of the cases and examine how guidance by the Commission can be found in other ways.

A rather new statement by the Commissioner Mario Monti regarding the appraisal of collective dominance was cited in the introduction to chapter 5. This statement is perfectly pointing out the logic of the game theory with all its three elements. Thus the game theory clearly appears to be the suggested approach to collective dominance, by the Commissioner. Of course, this statement was given only by one Commissioner and not of the Commission as such, so why should it be given any importance?

Firstly, the speech seems to be more than a non-commitment statement on the Commission's practice in merger control regarding the concept of collective dominance. It is given in the context of the 10 th anniversary conference of the E.C. merger control and it appears to be a declaration on how the Commission *actually* proceeds[228] in its appraisal of collective dominance, e.g. which concepts it follows. Consequently, in my opinion, this is an *official* statement that may serve as an interpretation help where the verbal interpretation cannot give a clear answer.

Secondly, there are two studies on collective dominance which have been made on behalf of the Commission. [229] The second, more recent study (Kantzenbach II), applies the game theoretical approach for the appraisal of collective dominance. It indicates the elements of the game theory, as they have been pointed out by the Commissioner Mario Monti and described above, as the decisive phenomena of the problem of collective dominance together with the phenomenon of interdependence. [230] The relevant question according to this study is "what impact the high degree of oligopolistic interdependence among suppliers in concentrated markets will exert upon market behaviour". Market behaviour is referring to the totality of firms' strategic behaviour being based on the three decisive factors of the game theory.[231]

It is obvious that the study has not the same dignity as the case-law not to speak of the Merger Regulation. One could even claim that it has less dignity than an official non-binding statement by the Commission. Nevertheless, even though the study is made on behalf of the Commission and not by the Commission itself, it can be assumed that the Commission will follow the study in most of the cases since it represents the economic expertise the Commission is in need of in order to be capable to comply with the economic and legal standard imposed on it by the ECJ in the *Kali und Salz* judgement.
It is also worth while to remind of the Commission's obligation to make use of its discretion when applying rules of an economic nature like Article 2 of the Merger Regulation.

It follows from the foregoing that the study and the Commissioner's statement may give guidance to a certain degree. The statement of the Commissioner has been given quite

[228] In the speech the commissioner is saying: "In terms of our substantive analysis, the Commission examines …", giving by that a clear declaration on how the Commission *actually* proceeds in its assessment of collective dominance.
[229] The text in the beginning of the study runs as follows: "This document has been prepared for use within the Commission. It does not necessarily represent the Commission's official position"
[230] Kantzenbach, E./Kottman, E./Krüger, R., *New Industrial Economics and Experiences from European Merger Control – New Lessons about Collective Dominance?*, Luxembourg, 1995.
[231] Ibid, pp. 4-6.

precisely a year after the *Air Tours/First Choice* decision, so it appears to be very likely that the game theoretical approach will be followed in future cases more consequently as the decisive underlying economic concept to the concept of collective dominance. However every rule has its exceptions and efficiency considerations as pointed out in the previous chapter may take over, even implicitly.

Official statements by the Commission can also be found in the yearly Competition Reports and in the Competition Policy Newsletters.[232] These statements have neither any legal effect as the statement by Mario Monti and the study discussed above. Compared with Mario Monti's statement and the Kantzenbach II study, the Reports and the Newsletters express even less about what economic concept forms the basis for the legal concept of collective dominance.

Further, the Commission has issued 'Best Practice Guidelines' for the firms aiming at providing information on the notification of a merger and about the proceedings during the European merger control. More specific information about the criteria and the concepts of the merger assessment is however not given. The 'right place' where this kind of information could be found are apparently the Interpretative Notices. Like everything taken up in this chapter (6.5), these notices do not have any legal effect either, their objective is purely to supply information about how to interpret critical issues[233]. However, there is currently none regarding the concept of collective dominance and it would be a very good idea for the Commission to issue one explaining the economic reasoning it applies in its decisions when living up to its discretionary margin regarding the rules of an economic nature. That would have the important effect that the merger control would become more predictable despite the case-to-case approach taking into account the characteristics of each specific market.

6.6 Law and Economics in E.C. Merger Control

6.6.1 Keeping Law and Economics apart

Law and economics are interrelated in several ways. This is particularly true for competition law, which derives most of its rules directly from economics. Despite this, it has to be kept in mind that law and economics are two completely different fields, why it is important to clearly distinguish legal thinking from economic reasoning. In this chapter I will first explain why legal and economic thinking clearly should be distinguished from each other and secondly, how this could be done, especially in relation to the issue in this essay. I shall however mention, that this is not going to be a deeper analysis of the relationship and differences between law and economics, because this is not what this essay is about. The aim is to explain an essential basis of this essay.

Referring to the first question, economics and law have to be considered as to their very nature. Law consists of rules for the living together of human beings in a society.[234] Although these rules are derived from rational behaviour in reality or should be it, law forms its own reality determining how 'the game should be played'. Thus, the

[232] The newsletters and the reports are published on the Commission's homepage: www.europa.eu.int/comm/competition

[233] A more detailed discussion about Notices and Guidelines can be found in Hildebrand, as note 17 above, pp. 334 et seq.

[234] Meyers Enzyklopädisches Lexikon, vol.19, p. 663, 'Recht'.

jurisprudence, which is about the interpretation of the law being in force, builds on a legal reality which does not necessarily coincide with the reality as such. In contrast to law, economics study the reality as such.

The consequence of the different natures of law and economics is that different methods and different ways of reasoning are used. Law is a science mainly building on rationalism instead of empiricism. Economics however mainly comprise empiricism excluding purely rational reasoning. [235] Therefore, in law there are no assumptions and models on how law could be. Certainly, there often exists no clear answer in law but the 'value' of various alternative answers depends on the legal system as a whole, and not on the reasonability of a model or an assumption. Assumptions and models about the reality as such are however central in economics which mainly comprise empiricism. The models or theories in economics are evaluated by the reasonability of respective model or theory itself, there does not exits any 'overarching rationality' as the legal system constitutes in the jurisprudence.

To sum up, law and economics *are* different in their methods and reasoning. The next question is *how* to deal with the economic background of competition law. The concrete answer to this question in relation to the subject in this essay will be given in the next chapter (6.6.2), where the importance of economic theories to the legal concept of collective dominance will be analysed. Here, I will try to answer this question more generally.

The first aspect to be taken into account is that economics doubtlessly do play an important role in the competition law. According to the Commission, the objectives of E.C. competition law are many and diverse, they are "[…] economic, political and social"[236]. Further, the Commission has an discretionary margin when applying the rules in the Merger Regulation which are of an economic nature. In other words, the legal rules given in the Merger Regulation are more like a framework law, leaving it open how the rules in detail should be applied. Consequently, a common economic understanding is needed by the Commission and those who want to comprehend the Commission's decisions. As a conclusion from this aspect, the role of economics in competition law, especially merger control, is to complete the purely rationalism of the legal system by detailed rules adopted to each case and directly derived from economics.

A second aspect is that European competition law is a compromise between various nations.[237] Therefore it is far away from a concept which complies with one specific or a certain set of economic theories. A second conclusion to be drawn thus is that an analysis of the case-law should not rigorously be related to specific economic theories, but to a common understanding as especially has been explained in the conclusions to chapter 4.

Thirdly, it has already been pointed out that lawyers and economists have different ways of reasoning and that they use different terms for a similar (but not necessarily perfectly the same) phenomenon, however seen from two differing perspectives. The

[235] Meyers Enzyklopädisches Lexikon, vol.25, p. 427, 'Wirtschaftstheorie'.
[236] Competition Policy Newsletter, May 1993.
[237] Koch, as note 89 above, pp. 14, 17.

most important example is the legal concept of collective dominance, which has no direct counterpart in the economics.

The third and last conclusion regarding the issue how to deal with economics in competition law, is that economic concepts in principle should not be equated with legal ones; for example 'oligopoly' does *not* mean collective dominance and is *not* a problem in itself. Economics is merely a tool in order to help to explain the legal concept, which is based on economics but has its own premises. Naturally, law still is the starting point in competition law and what counts in the end is the legal thinking even if it is 'economic nonsense'. However such a situation of 'economic nonsense' will hardly arise since a high economic standard is the norm the Commission has to follow in its merger appraisal.

6.6.2 The Concept of Collective Dominance and Economic Theories

The subject of this chapter is to summarize the central items of what has been analysed and discussed regarding the use of economic arguments and theories in the case-law. To begin with, in chapter 2 I introduced the economic theories which best could be used to describe the legal concept of collective dominance. This was merely in order to give a definition of collective dominance as an important ground to stand on in this essay.

Going more into detail of economic theory, in the conclusions of chapter 4 I discussed which economic theories could be used in an analysis of the case-law dealing with collective dominance and how these theories should be used. The essence of that discussion was that economic theories should be considered as a whole even though divided in a structural and behavioural (game-theoretical) approach.

Further, in chapter 6.1 I closely examined in an overall comparison of various cases how the economic basis of the concept of collective dominance was formulated, expressed by what I call the 'relevant question'. This analysis was about how economics in the assessment of collective dominance actually *is* applied. In other words, using the results of the in detail analysis of chapter 5 (the comparison of the actual decision and the decision which economically would make sense), chapter 6.1 gives a feed-back to what has been concluded in chapter 4. The feed-back partly supports the conclusions of chapter 4, namely that both structural and a behavioural elements can be found in the Commission's and the Courts' approach to the appraisal of collective dominance. However, there is a significant and incomprehensible irregularity in respect to the application of the game-theoretical approach (behavioural approach), especially concerning the quite current decision in *Air Tours/First Choice*.

Finally, the foregoing chapter (6.6.1) was aiming to investigate the significance and the application of economic theories in competition law in general. In context with the findings of the discussion about the role of economics in the collective dominance appraisal in the previous chapters, the conclusions from chapter 6.6.1 explicitly points out the significance for the collective dominance appraisal of the deeper relation between law and economics which has been followed throughout this essay. In this relation law takes precedence over economics, but as a paradox, like it may appear, a high legal standard in merger control is directly connected to a high economic standard.

Leading over to the next chapter, it is important to mention that it is hardly possible to abstract economics. Despite the general models of SCP and of firms' strategic behaviour (game theory), it is very difficult to predict a decision in a merger case, since the economic factors being part of these theories can be interpreted in various ways, depending on the specific situation.

6.6.3 Legal Certainty contra Economic Flexibility

It is undisputed that both legal certainty and economic flexibility are important objectives in the European competition law. The significance of legal certainty is self-explanatory. Economic flexibility is important in order to attain reasonable and equitable decisions. As it has been said in the transition from the foregoing chapter, it is hardly possible to abstract economics. Therefore economic flexibility is necessary in order to adopt to each individual case, taking into account the specific situation in the case. However, the two objectives of legal certainty and economic flexibility are contradictory. Thus, the question is, to what extent legal certainty gives way to economic flexibility in E.C. merger control, and whether this complies with a sufficient standard of legal certainty.

In *Kali und Salz* the ECJ for the first time ruled about the criteria the Commission has to live up to in its merger control. The Commission has to attain a high economic and a high legal standard. The legal standard implies a strong onus of proof, i.e. there have to be convincing arguments in order to determine the likelihood of collective dominance.[238] The high economic standard is expressed in the Commission's obligation to make use of its discretionary margin when applying competition rules of an economic nature (it is quite natural that most of the competition rules are of that type).[239]

The case law in *Kali und Salz* regarding the level of the economic and of the legal standard was followed up in the cases *Gencor* and *Air Tours/First Choice*. As already established above in chapter 5, the Commission actually *has* a considerable discretion applying the competition rules. According to some scholars, the judgement in *Kali und Salz* primarily is an *economic* one[240], the main emphasis laying on the economic argumentation.

From the aforementioned it follows that although no exactly quantifying answer can be given to the question about to what extent legal certainty gives way to economic flexibility, one can say that legal certainty has to stay back behind the economic flexibility to a very large extent. This is not only due to the economic nature of the rules in the Merger Regulation, but is also being emhanced by the Commission's case-by-case approach.

The question that naturally will come hereafter is whether the strong emphasis on the economic argumentation nevertheless ensures a sufficient legal standard. There are two arguments which could be presented in favour of a sufficient legal standard in E.C. merger control. The first argument is that despite its considerable discretion the Commission is bound to a teleological approach, taking into account the purpose and

[238] See chapter 5.3 above.
[239] Ibid.
[240] Zekos, as note 119 above, p. 40. Venit, as note 117 above, p. 1105.

intent of the competition rules. [241] The second argument states that by complying with the economic standard, the Commission will automatically be able to demonstrate a sufficient legal standard, as long as the assessment falls within the scope of the legal concept of collective dominance. In other words, the observance of common sense in the economic argumentation increases the predictability.

Though much of these arguments may support that a sufficient legal standard is secured in E.C. merger control, there are strong reasons speaking against it. In chapter 5.3 I already pointed out that the outcome of an economic analysis normally is not easy to predict, since every case provides for a specific situation making an individual evaluation of the economic facts necessary. Consequently, it is not necessarily correct that the compliance with the economic standard implies a sufficient legal standard. In the extreme, the pure reliance on economic analysis enhances the deficiencies of different economic theories.[242]

Coming to a conclusion in this issue, I suggest that a rigorous economic analysis normally does not need to be totally unpredictable. As we have seen in chapter 5, it regularly is possible to figure out how the situation in a case should be evaluated according to common sense. Of course, the contents of 'common sense' is not undisputed. Thus, the outcome of a collective dominance assessment rarely can be predicted totally, some ambiguous elements might always be at hand.

Consequently I argue that the legal standard attained by the Courts and the Commission is in principle sufficient. However there can be done a couple of things in order to improve the legal certainty.

First, it would be of great help if the Commission issues guidelines on the concept of collective dominance, in which the economic background of the concept of collective dominance explicitly is explained. That would have the important effect that despite the case-by-case approach, the merger control related to collective dominance would become more predictable pointing out what 'generally' makes sense by economic terms. Of course, it is a question which needs careful weighing to which extend economic reasoning can be generalised. In this question it is important to remember that equitable results normally presuppose that the individual preconditions in a case are taken into account.

Second, definitions enhance predictability as it has been suggested in chapter 6.3 with respect to the number of firms constituting a collective dominance. The problem that definitions are too stationary and thereby hinder equitable results can be reduced by allowing exceptions from the definitions if an equitable result demands so. Another difficulty that may appear from the latter suggestion is to draw the borderline between cases were an exception should be made and those were this should not be allowed. This is again a question which needs careful weighing, but as I can see it, the overall effect from an (slightly) increased number of definition could enhance both legal certainty and equitable results.

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[241] Zekos, ibid. Venit, as note 117 above, p.1102. Koch, as note 89 above, p. 17.
[242] Zekos, as note 119 above, p. 44.

Finally, referring to chapter 6.4, legal certainty would be improved a lot if the Commission (and the Courts) explicitly pointed out when economic efficiency considerations are used and how these are used.

7 Conclusions

To begin with the positive developments in E.C. merger control regarding the concept of collective dominance, Van den Bergh is not right stating that outdated economics has survived in the form of modern legal thinking.[243] In fact, the Commission and the Courts have adopted a rather modern approach when applying economics in the assessment of collective dominance, including more recent key ideas developed in economics like the game theory.

The main problem is however, that there often is a lack of consistency in case-law, in particular with respect to the application of the game theory. Moreover, there is the difficult task to balance equitable results provided by economic flexibility against legal certainty.

Despite these fundamental problems, in my opinion there are at least some indications of the outcome in merger cases possible. This will probably improve to the extent the Commission develops meaningful benchmarks from the economic material in its case-law.

Regarding the future developments in the assessment of collective dominance the Commission announced in its last Competition Report of the year 2000, that

> "In examining collective dominance and its effects, the Commission is conscious of the particularities of each sector and very much sticks to an analysis carried out without preconceptions and on a case-by-case basis. An interesting corpus of precedent is being built up which will eventually form the basis of a *forthcoming notice on collective dominance*." [244]

This announcement expresses explicitly, that the Commission considers that some guidance in the issue of collective dominance is necessary. Instead of a guideline, like I have suggested, a notice is aspired. As to the legal effect, this makes no difference since both do not have any legal effect.

However, the Commission does not announce a date for the publication of such a notice. On the contrary the Commission directly says that there still has to be gained some experience before the notice can be issued. Could this be a concession, that there is still insecurity about the exact scope of the concept of collective dominance? This would however not be surprising since the technological and commercial developments steadily change the markets.

Last but not least, competition law is subject to European competition policy which is influenced by many nations which all have their own system of competition law. Thus, legal certainty is hard to achieve taking this aspect into account.

[243] See chapter 1.2 above.
[244] Competition Report of the year 2000, para. 259. The italiques were made by the author of this essay.

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Bibliography

Bladini, Filip, 'Den konkurrensrättsliga argumentationen' in: *Ånd og rett – festskrift til Birger Stuevold Lassen*, Oslo 1997.

Baumol, William J./Blinder, Alan S., *Economics, Principles and Policy*, 7th edition, Harcourt Brace & Company 1997.

Bork, Robert H., *The Antitrust Paradox – a Policy at War with Itself,* The Free Press New York, 1993.

Briones, Juan, 'Oligopolistic Dominance: Is there a Common Approach in Different Jurisdictions? A Review of Decisions Adopted by the Commission under the Merger Regulation' in: *ECLR [1995] 6*, p. 334.

Briones Alonso, Juan F., 'Economic Assessment of Oligopolies under the Community merger control Regulation' in: *ECLR [1993] 3*, p. 118.

Burton, John, 'Competition over competition analysis: a guide to some contemporary economics disputes' in: *Frontiers of Competition Law*, edited by Lonbay, Dr. Julian, Institute of European Law, University of Birmingham 1994.

Caffarra, Cristina/Kühn, Kai-Uwe, 'Joint dominance: The CFI Judgement on Gencor/Lonrho' in: *ECLR [1999]*, p.355.

Carlton, D.W./Perloff, J.M., *Modern Industrial Organization*, 2nd edition, Harper Collins College Publisher, New York, 1994.

Cook, C.J./Kerse, C.S., *E.C. merger control*, 3rd edition, Sweet & Maxwell, London 2000.

Cooter, Robert/Ulen, Thomas, *Law and Economics*, Harper Collins Publishers, 1988.

Hildebrand, Doris, *The Role of Economic Analysis in the EC Competition Rules,* Kluwer Law International 1998.

Kantzenbach, E./Kottman, E./Krüger, R., *New Industrial Economics and Experiences from European Merger Control – New Lessons about Collective Dominance?* Office for Official Publications of the European Communities, Luxembourg, 1995.

Koch, Robert, *European Union Policy Briefings: Competition Policy and Law*, Longman Group, Consultancy Europe Associates Ltd., 1994.

Korah, Valentine, *EC Competition Law and Practice*, 7th edition, Hart Publishing, Oxford 2000.

Monti, Mario, 'The main challenges for a new decade of EC Merger Control' at: EC Merger Control 10th Anniversary Conference, Brussels, 14-15 September 2000.

Motta, Massimo, 'E.C. Merger Policy and the Airtours Case' in: *ECLR [2000]*, p. 203.

Nicholson, Walter, *Microeconomic Theory, Basic Principles and Extensions*, 7th edition, The Dryden Press 1998.

Rees, Ray, 'Tacit Collusion', in: *Oxford Review of Economic Policy*, Vol. 9, No. 2, p.27.

Smith, Rhonda/Round, David, ‘Competition Assessment and Strategic Behaviour’ in: *ECLR [1998]*, p. 225.

Van den Bergh, Roger, ‘Modern Industrial Organisation versus Old-fashioned European Competition Law’ in: *ECLR [1996]*, pp. 75-87.

Ritter, Lennart/Braun, W. David/Rawlinson, Francis, *European Competition Law: A Practitioner’s Guide*, 2nd edition, Kluwer Law International 2000.

Venit, James S., ‘Two steps forward and no steps back: economic analysis and oligopolistic dominance after Kali & Salz’, in: *CMLRev. [1998]35*, p. 1101.

Weibull, Jörgen W., *Evolutionary Game Theory*, Massachusetts Institute of Technology, 1995.

Ysewyn, Johan/Caffarra, Cristina, ‘Two’s Company, Three’s a Crowd: The Future of Collective Dominance After the Kali & Salz Judgment’, in: *ECLR [1998] 7*, p. 468.

Zekos, Georgios I., ‘The New E.U. Approach to Mergers and Market Integration’ in: *ECLR [2000]*, p. 37.

Material from the DG Competition
(at: the DG Competition’s homepage: www.europa.eu.int/comm/competition)

Competition Report 2001
Competition Report 2000
Competition Report 1999

Competition Policy Newsletter, June 2001.
Competition Policy Newsletter, May 1993.

Encyclopedia
Meyers Enzyklopädisches Lexikon, Bibliographisches Institut Mannheim, 1971.